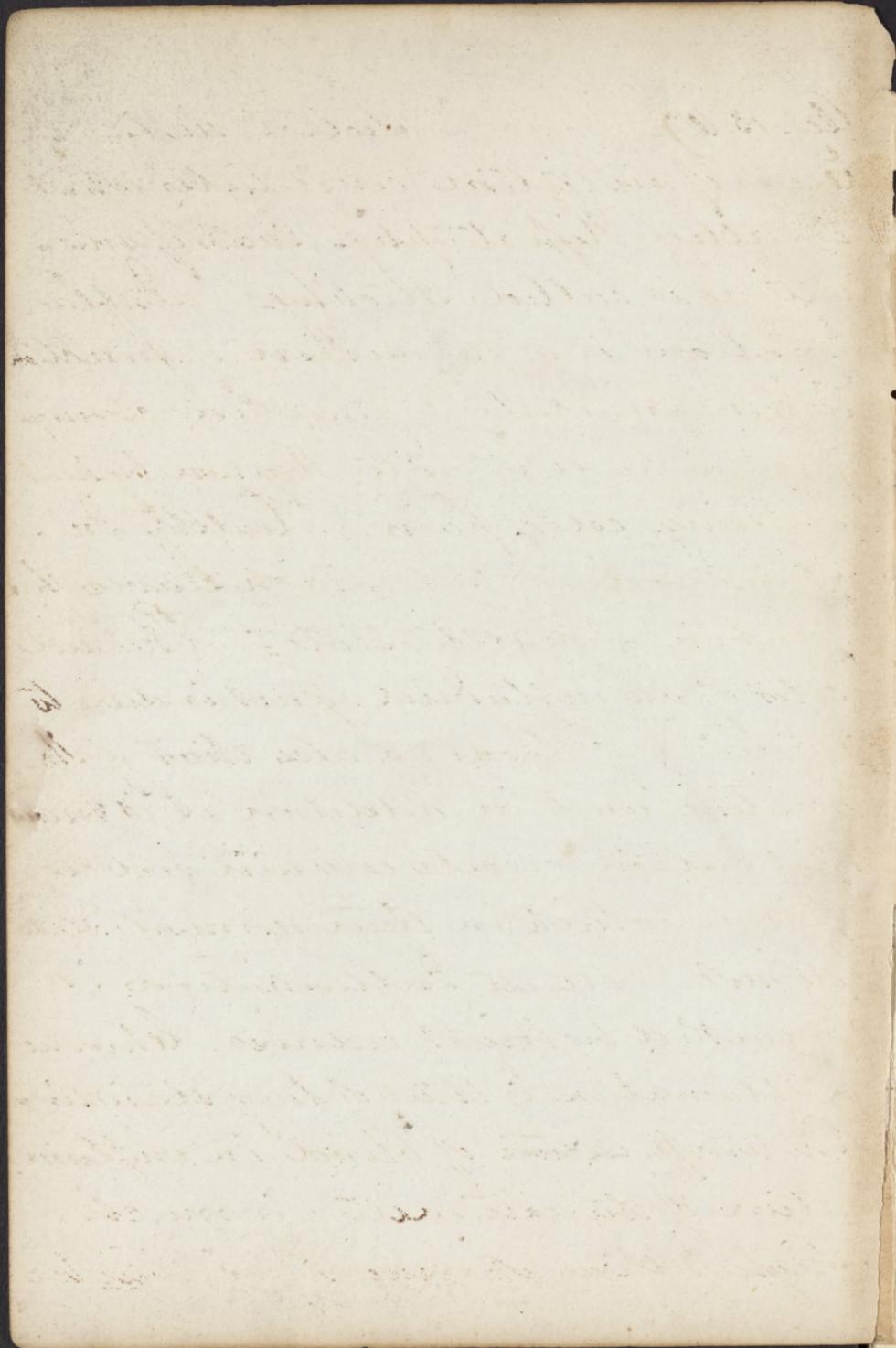


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Notes taken upon Lectures  
delivered by  
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on Surgery.

J. M. Howe, Oct. 13. 63.

2-27-63 Mrs. Abbott & Steel



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Lecture no. 1.

Excess of nutrition constitutes what is called Hypertrophy. Lack of nutrition is called Atrophy. Inflammation is a perversion of function accompanied by a marked change from a healthy state, known by heat, swelling, color, pain. "Healthy Inflammation" is that which leaves the part in a healthy state. The red color of an inflamed part is due to an excess of blood as also that of the matine and in addition it is found that certain vessels contain red corpuscles which in their normal state do not. Acute Inflammation is marked by bright redness. Chronic Inflammation is that of long standing. The temperature of blood in inflammation of the extremities is much higher than it usually is there but

is but very little higher than the temperature of blood at the source of circulation. Nunalytic pain is somewhat relieved by pressure. Inflammatory pain is augmented by it.

It has been supposed that in parts inflamed new vessels were formed, but Hunter's experiment proves that the calibre of the vessels were merely augmented. There is also a change in their course and are more tortuous. Swelling used to be considered due to the congestion of the vessels - but it is now believed that it is due to cell action which is increased and draws into the tissue a large amount of liquid. In loose connective tissue swelling is more marked. The cause of this is that there is more room to receive this liquid. Least in the

Glands - or in the Fibrous tissue - the cause of this is that there is little room for an addition of liquid, and therefore the swelling is tight and very painful. On account of the heat attendant on Inflammation it is called "Inflammatory Fever." This begins usually with a chill. The skin when handled shows "goose flesh" proving that the circulation is suspended not being near the skin. The blood must therefore some where else - where is it? In the internal organs. The tongue is furrowed and the pulse high ranging from 108 to 120. This disease follows a wound - a wound of the lung is often followed very soon by "Inflammatory Fever." Uncleanness is a cause of Inflammation, the use of alcohol is stimulus helps Inflammation, as also Constitutional peculiarity predisposing that malady. Serum is the first product of Inflammation - Sypm the second

and Run the Wind and last-

Serum and Fibrin are the products  
of what is known as healthy Inflammation.  
The Serum is never found pure, but is  
always mixed with lymph and fibrin.  
Lymph cells are spherical and resemble  
the colorless corpuscles of the blood.  
There are two varieties of Lymph one the  
fibrillated and the other the corpus-  
cular. Fibrillated Lymph often forms  
what is called "False membrane." Corpus-  
cular Lymph contains oil globules and  
tends to liquefy. Healing by the "first in-  
tent" is separation by adhesion and  
is due to Fibrinous Lymph.

There are certain profuseous measures  
which must always be employed  
in order to keep the inflammation

from outward injuries. Thus under certain circumstances it becomes necessary to exclude all air from a wound or it may be well to elevate a limb when inflammation exists. It serves to drain the blood from the part. But it is a very useful measure. By this it is not well to fast, for often the amount of food must be augmented. And in suppuration a large amount of alum is absolutely required. Water dressings are the best applications to inflammation. Flaxseed poultice contains a certain amount of oil which undergoes decomposition and it is therefore in a degree irritant. Warm water dressings are very useful. They are employed when warmth is required. In all these water dressings drugs may be employed in connection with them. such as

opium, liquor plumbi, sal. acet. &c.  
Lemura irritative is often used in w.  
due to reflex inflammation. This may  
be done by heating an iron in boiling wa.  
ter and drawing lines over the part, this  
will remove deep seated inflamma.  
tion. General treatment consists in  
acting upon the various excretaries.  
This is done by purgatives, diuretics.  
Saline cathartics are particularly  
useful in surgical treatment. The  
same may be said of Wroth's Powders  
in fact 10 or 15 gr may be used in al.  
most every instance. Ammonia  
is very useful as a stimulant, par-  
ticularly as it does not act upon the  
brain. Brandy should not often be  
used alone - but most commonly  
it should be presented in the  
form of milk punch. Pharmacy  
(which need to be considered)

specific) should not often be used  
in surgical inflammation.

The pus corpuscle is the fibrin or lymph  
corpuscle disintegrated. Pus consists of  
two parts one is a liquid called "pus serum"  
the other is granular matter called "pus  
cells." Healthy pus is perfectly mild &  
unirritating and is tasteless and posse-  
no smell. The "pus corpuscle" has no spe-  
cific character. They are always formed  
by the division of pronucleating cells. Pus  
is due to the disintegration of Fibrin.  
When suppuration goes very far the pus  
degenerates - then the "pus serum" destroys  
the pus corpuscles - and becomes watery  
and acrid, possessing an acid reac-  
tion. That pus, which will if introduced  
into another person so provokes cell action  
as to produce the same disease is cal-  
led "specific pus." Abscess are due

to the collection of pus. There are  
thin circles around every abscess. in  
the middle is found pus. which to the  
touch feels, in a degree, soft. next out  
side is a ring which feels hard, this  
is due to the exudation into the Tis-  
sues of Fibrin. outer side of this is a  
circle which gives on pressure and  
is due to the formation of lymph which  
is more fluid than Fibrin and there-  
fore is forced easily into the surround-  
ing tissue on the touch. You can  
discover the presence of an abscess  
by the fluctuation of the contained  
liquid. This must be done by the touch.  
In order to cure an abscess (if) it is just  
necessary to diminish inflamma-  
tion. The second is to encourage  
relaxation, that the abscess may  
not be subject to increased in-  
flammation. The third is to

free the pus, which must be done by a free opening. The fourth and last means, is to use means to diminish the size of the cavity of the abscess. An abscess should be evacuated early. It should not be left until a quantity of pus had formed, for the destruction of tissue will then be greater if it were discharged at an early period.

A Fistula is tract of an abscess or what has been an abscess out of which pus has flowed. The cure for them is to cause healthy inflammation. A chronic or cold abscess resembles an acute one only in being a circumscribed collection of pus. An abscess (cold) is often incident upon a fall, but it is not due to the fall, but is usually consequent upon disease of the bones or some internal

affection. Symptoms of cold ab-  
cess are as follows. Just a dull heavy  
pain. Then a hard immovable lump  
will show itself but at length the  
abscess will become softer and fluc-  
tuative. The pus of the cold abscess is  
imperfectly formed - watery and  
of a yellowish green color. There  
are few signs of inflammation. The  
walls are thicker and are not  
as vascular as acute abscesses.  
Although the interior of the wall a  
membrane seems to exist, this is  
nothing but a "false membrane".  
The tendency to spreading of a cold ab-  
cess is much slower than that of an  
acute abscess. A cold abscess should  
not be evacuated as long as it can  
be prevented else it will cause  
a Typhoid form in the patient. The  
air has a very injurious effect upon

one of these abscesses when opened - it makes the pus very fetid and acid. It also forms a chemical combination with the pus making hydro-sulphate of ammonia.

Pyemia. This disease is found in persons who have been exposed to the influence of animal or vegetable decomposition. It is caused also by injuries of the bones, especially if the injury occur in the cancellated tissue, or from excessive suppuration. The number of white corpuscles are augmented. and in the veins collect clots or "Thrombi" and absorption of ichors takes place. Symptoms are as follows - Great prostration of the nervous system. Suddenly, after two or three days of severe suppuration or after a sur-

gual operation or after parturition -  
in a heavy chill takes place -  
soon after there is a slight react.  
ion, and it sometimes happens  
this is followed by prostration -  
These chilly feelings and differ-  
ent parts of the body are felt. If  
a wound is present the granu-  
lations are apt to become light  
and flabby, and the pus is watery.  
The pulse becomes very weak and  
irregular - constituting what is known  
as the "air bubble pulse." The secre-  
tions are stopped. The contin-  
ence becomes troubled. When  
life lingers for some time in this  
state, metastatic abscesses are  
formed in various parts of the  
body - which are not detected un-  
til the "post mortem" is made -  
There is a peculiar sickling

small which arises from the Skin.  
The prognosis of this disease is ex-  
ceedingly unfavorable - but few  
recover - Fricke believes that  
near the seat of the wound a thin  
boue or clot of blood collects in a  
vain. This clot contains both red  
and white corpuscles. This clot  
does not suppurate as formerly sup-  
posed but according to Fricke  
the febrile exudate divides an  
shove up and resemble pus cor-  
puscles these are carried on in  
the circulation and that is what  
forms metastatic abscesses in  
remote parts of the body. Treat-  
ment. Chalybeatis - Tonics and  
Stimulants of the latter of these Ann  
about gr. X 3 times a day is the best.  
Milk Punch. When little abscesses  
form under the skin they should

be promptly and freely opened. Compression or an application of red hot iron burning the main vein leading near the seat of injury to an eschar an favorite remedy. It is hoped by this treatment the propagation of the blood poisoning may be prevented.

Ulcers. Ulcers may be defined by saying that they are the result of inflammatory action which induces a break of continuity. Ulceration is always due to previous inflammatory action. Ulcers are of three varieties. Those which are the result of healthy inflammation those which are the result of unhealthy inflammation and the chronic. The edges of a healthy

ulcer are smooth, uninflamed  
and unswollen. The granulations  
and surrounding parts are healthy.  
The pus - is yellow, free, and un-  
irritating. Wounds healing by the  
2nd intention are good examples of  
healthy ulcers. These healthy ulcers  
need very little treatment - but shd.  
be looked to - and rest should be  
advised. A cloth wet with vinegar  
makes a very good application. Shd.  
the reparative process falter stimula-  
tion should be applied. Unhealthy  
ulcers are inflamed and are  
painful. The inflammation may  
be over or under skin - if over it is call-  
eritable - if below it is called the slay-  
ing ulcer. The edges are rugged &  
are burrowed - and Eczema is of-  
ten developed in the surrounding  
parts. Bowels are usually consti-

spatulæ - Inability to sleep and  
bad temper - all these form sym-  
toms of unhealthy ulcers. Treat-  
ment - Purging - should first be done.  
Mineral purges are the most  
efficacious. Plain but good food  
should then be prescribed. Then  
the local treatment should com-  
mence. The best of these is warm  
water dressings - if the ulcer is so  
irritable that it cannot bear the  
application, medicate the water  
with a little Laudanum. If  
the ulcer spreads, and presents  
a phagedenic nature a caustic  
should be applied. Soves Pow-  
der should be always used.  
This ulcer almost always occurs  
on the leg near the ankle and  
inside of the Leg. Inflamed ul-  
cers are those which are of long

duration and rest treatment  
for some time. The granulations  
are often grey. These indolent or  
lazy ulcers are not painful. Reces-  
sion is always to be applied either  
by bandage or plaster. If the part  
becomes too warm under the bandage  
cool water may be applied. Four pts.  
of melted bees wax with one part of  
limpetine poured on to the ulcer is  
often useful. The heat stimulates &  
the wax removes the dirt and old  
scar. In order to remove the filed edge  
or an application may be made of  
100 pts. or flaxen of Paris - and 1 pt. of Coal  
Tar. The toenail ulcer is sometimes  
erronously supposed to be due to the  
ingrowing of the nail - but it is really  
consequent upon the riving of the flesh.  
The remedy is to force a piece of Valent  
Lis between the nail and the toe.

Mortification - (Gangrene either perfect or imperfect.) Imperfect gangrene is properly mortification or gangrene in its earliest stage. Gangrene is used to designate death of the soft parts. When gangrene is circumscribed to a small space it is called a slough. When this takes place in the bone it is known as excoriation. Symptoms - Change of color - partial or total loss of sensibility - loss of temperature - the function of the part is diminished. The difference between humid and dry gangrene is in the difference of liquid present. The pulse fails and is weak. High colored urine. Constipation or some time diarrhoea exists. The cuticle is elevated and blisters. The line of demarcation is the boundary

between the dead and the living tis-  
sue. The line of ulceration is the one  
which divides the limb - between the  
living and the dead parts. The prog-  
nosis is various. It is favorable if  
the "line of ulceration" is promptly form-  
ed. Treatment - develop healthy  
inflammation in advance of hum-  
id gangrene. This may be done by  
a blister or by a hot iron - Another  
good way is to remove the dead  
part. This may be done by the knife.  
The living part should not be cut in-  
to - but remove all the dead part &  
wash the part off. Give surround  
heat and moisture to a part already  
gangrenized. A Poultice may be  
applied to the line of ulceration -  
Apply full dose and Liebig's soups -  
Give Tonics, and Grow - especially Iron  
Ferric Lekl. Administer Opium freely

Hospital Gangrene - consequent upon  
or crowding patients in Hospitals.  
It is due to a poison now unknown  
which enters the blood. Symptoms.  
Depression, weakness, weak pulse.  
Wound presents unhealthy inflam-  
mation & unhealthy granulations  
over the granulations particular-  
ly at the edge of the wound is  
found a greyish milky film.  
The pus if before healthy becomes  
very liquid and acrid. As the  
sloughing progresses the pain be-  
comes sharp. Inflammation  
of the Sypnhalic glands may be  
noticed. The Prognosis depends  
very much upon your ability to  
remedy the bad atmosphere and  
supply good food. Fumigate the  
rooms with any of the Choloids.  
Prescription. Expose Bromine

in the room until the smell of it becomes perceptible. Mix Bromine (xx or xx gts. of it) to Alcohol  $\beta\beta t$ . applied to the sloughing wound is an application lately found to be the best. The dead portions must all be removed and the moisture all taken up by patient's lint or blotting paper. Then the Bromine must be applied. The patient should be anaesthetized as the application is very painful. Dry Gangrene. The symptoms are very much the same as in the Hospital Gangrene, but there is hardly any moist products. It is a local affection, for the surrounding parts are generally found to be healthy. The cause of it is the plugging up of the artery - inverted intumescence. Then fully degeneration takes place. Amputation should not be resorted to in

this disease. This should only be resorted to in superficial Gangrene. Erysipelas. When it involves the areolar tissue it is called Flegminous erysipelas. A chill is a foreunner of this disease. A change of the wound may be noticed. The pus becomes acrid and watery. The wound becomes bluish. The inflammation of acute Erysipelas is very livid. If it occurs near the head it is apt to be transferred to the Brain. The wounds are apt to slough. Erysipelas may end by resolution or by sloughing. The Prognosis depends upon the situation, extent, habits of the patient. In the epidemic form it is apt to be fatal. This is a blood disease. Treatment. Begin by giving a small

purge. and it may be an emetic.  
Acetate of Potash - and Fuchs Tonic  
Fructuatic. Tonics. As a local ~~inflammable~~  
~~flavorous~~ treatment mustard  
is a very pleasant treatment.

"Primary shock" is but depression &  
is in proportion to the injury causing  
the shock. As in most cases the patient  
can not swallow it is wrong to put any  
thing into the mouth. External applica-  
tions such as to place a very large  
mustard plaster over the epigastrium  
and on the extremities. Apply friction.  
Inject into the rectum some stimulant  
such as whisky and water. Turpentine.  
salt and water &c. Dash water into the  
face. Tickle. and strike the patient on  
the ribs. Call the patient loudly and  
use every means to wake him out of  
his stupor. Take care that the re-

action is not too strong if it is  
it may be necessary to apply band-  
ages of broken ice on the head, or  
prescribe warm foot bath -  
�lin immediately and contin-  
uing for some time after the in-  
jury the patient will be very  
talkative and speak lightly of his  
accident. When this is the case  
be wary of what is known as  
"Insidious shock." Begin to treat  
early as in primary shock -

A wound is a violation of continuity having an external commu-  
nication and caused by di-  
rect violence. We may have  
union by the "1st. intention" or un-  
ion by adhesive inflammation  
or union by the 2nd. intention.  
The first object in a wound, is to

arrest hemorrhage and remove  
the clot. An artery divided entirely  
will bleed less than one partially  
divided.

Methods of arresting hemorrhage - When  
the blood comes from a great number  
of small vessels the limb should be  
elevated. cold should be applied, this  
may be done by wet cloths but these are  
apt to wash away the blood clot. ice  
in bladders is a better application.  
Miner's salt is the best application  
in the Malaria Nudica. It at may be  
used to arrest hemorrhage. The actual  
cutting is used - but secondary hem -  
orrhage is apt to occur after this applica -  
tion and it is therefore a very un -  
certain remedy. The tourniquet should  
be made of the very best material. A  
bandage should always be wrapped

around the limb with a compress.  
This instrument should not be left  
on more than two or three hours.

for it will cause inflammation.  
A ligature should be of Strong Sard.  
diss silk well waxed. In order  
to prepare a Surgeons sponge it shd.  
be placed on a board and han-  
mmed in order to break up the cor-  
al and lime in it. Then a little  
nitric acid diluted in water  
enough to prevent it from being an

Gun shot wounds. These may be either  
incised, punctured, contused or  
lacerated. The prognosis of incised  
wounds is usually good - they gen-  
erally heal by the first intention.  
The treatment of incised wounds  
is to wash, and remove the clots (unless  
this prevents hemorrhage) and

them coaptate the edges, and prevent too much vascular action. In lacerated wound it is useless to bring the edges of the wound close upon each other. Apply warm water dressings - as they are most effectual in preventing sloughing. All gunshot wounds present evidences of contusion and laceration, hence we may always expect them to slough. Primary hemorrhage from these wounds is very rare. Secondary hemorrhage is common. (Ho. After secondary hemorrhage Traumatic fever is likely to prove fatal. A conical ball seldom or never splits, nor does it often glance. The minie ball inflicts more injury than a round. The greater the velocity the greater the danger of the wound. A wound occurring from a very swift ball is most apt to produce hemorrhage. From

a slow ball secondary hemorrhage  
is likely to occur. The wound of  
entrance is smaller than the ball.  
The wound of exit is usually large-  
er and more lacerated than the  
wound of entrance. In search-  
ing for a ball the patient should  
be caused to assume the exact po-  
sition which he had the mom-  
ent of receiving the wound. The  
immediate removal of a ball  
should always be performed  
unless the danger of the loss of  
life is augmented.

The pain of a Gun shot wound is not  
usually great without some great  
nerve is injured. The lack of  
pain at the time of receiving a  
wound is due to paralysis of the  
nerves involved. The primary

hemorrhage is usually small. When reaction takes place the wound is usually very painful. The wound then swells. Fistulous openings are always due to foreign matters, that may be carried in with the ball. The prognosis in Gunshot wounds should be very guarded. Secondary hemorrhage usually occurs from the ninth to the twentieth day, that is if it does not occur at all. This is due to the separation of the slough. The best way of examining a wound is by thrusting in the finger. Water dressing is the most useful one in order to allay inflammation. In a large Hospital however it may not be well to use water dressings, for the large quantity of water will cause moisture in the wards and predispose Erysipelas and Hospital Gangrene.

At a general rule openings for the evacuation of pus should be made transversely to the fibres of the muscles. It is not well to open the canal of a gunshot wound "unbridle" it as it is called. The slough is seldom separated from a gunshot until the 21 day. If secondary hemorrhage occur from an artery apply compression above the wound and thrust the finger into the wound, and find if possible the artery and ligate it. if it cannot be found ligation above the wound may have to be performed. But if the hemorrhage can be stopped by filling the wound by chomper, & it may be necessary to saturate it with Moncels salt, it is the best application. Tannic acid or any styptic may be substituted.

for this salt if it is not at hand. As a general rule in Private practice secondary amputation is proper and in Military surgery primary amputation is indicated.

Tetanus. - Is a nervous disorder affecting voluntary muscles but not involuntary. Traumatic tetanus. Symptoms. - A person is wounded - wound does very well for 4 or 5 days. Then it becomes very painful - has a stiffness about the neck has no appetite - sometimes the pain occurs in the belly - the pain in the neck increases and goes into the muscles of mastication, has a disposition to frown, keeps the mouth closed - most the muscles of deglutition are affected. sometimes the diaphragm is affected - constipation is apt to occur. The mind all the

time is clear. In the next stage  
the paroxysms become more mark-  
ed. It may be that all the flex-  
or muscles are affected or it may  
be the extensor or lumbar mus-  
cles. Diagnosis. This is generally  
easy. It may be confused with  
Hydrocephalus but the cause will set  
our diagnosis right. Prognosis —  
This is very unfavorable. The cause  
is unknown. The treatment is  
prophylactic and palliative. Apply-  
ing the red hot iron (appleseed) to the  
wound when tetanic symptoms  
show themselves. Great difficulty  
is found in finding the patient.  
Enemas of Buff Essence may be used  
and purging can be effected by rub-  
bing the Epigastrium with Camlin Oil.  
Ether may be inhaled and serve to  
relax the muscles. Atropia has

burn used effectually in this disease.  
g. ij or  $\frac{ii}{iii}$  Water ~~ox~~<sup>3</sup> was made and given  
injected into the median line of the mole.

Wounds of particular Regions. - Wounds of the head. - If the periosteum is torn off the bone is most likely to die. if it is merely torn up and be replaced the bone may live. Wounds of the scalp are very apt to develop Encephalitis and this may be transmitted to the Brain. Incised wounds of the scalp are very apt to bleed freely. They usually gas & Humorrhage of the Scalp may usually be stopped by simple compression. The Hair must be shaved for any considerable wound. Incised wounds of this region must be approximated but the edges should not be drawn on to each other. Lead suture may be used, or ringlass plaster to approx-

minate the edges. Wounds of the scalp always suppurate, hence the wound should be kept open. Morphia gr.  $\frac{1}{2}$  to the 3 inject gtt. X or XII for hematology. This is done by the Hypodermic syringe.

The internal table of the scull is sometimes fractured when the exterior one is not. It becomes then very difficult to make a diagnosis of wounds of the head, and it should be very guarded until after the 9th. day. Blows, or other injuries of the head are often followed by Abcess of the Liver. The reason is not known.

Compression - characterized by depression - loss of the power of deglutition, lies as if dead. Com-

ussion - the hearing is affected, but  
the patient can generally be aroused  
by loud calling - the breath is so faint  
that it can scarcely be recognized -  
the respiration in compression is  
strong, slow and snoring - In com-  
pression the face is conjested and  
flushed, in concussion it is pale  
and looks dead - The prognosis in  
compression should be guarded for  
the substance of the brain may be bro-  
ken up - Until the 12 day one should  
be particularly guarded - The indi-  
cation in compression is, to remove  
the cause of compression - Surgeons  
are now beginning to doubt the use  
of trephining in limited depressed  
wounds of the skull - If compres-  
sion be due to conjection it will be-  
gin to show itself in about 24 hours  
if it be due to abscess it will not

be evident for a number of days.  
Hæmia Cerebri. - is a protrusion  
of the substance of the brain through  
a fracture of the skull. - It is due  
to the formation of an abscess in  
the brain and the propagating  
pus, forcing out the live brain  
substance. Treatment. - Apply  
some lint wet in lime water which  
will produce a small eschar  
over this lint apply a small piece  
of sheet lead which will make  
a very little compression. Draw  
Sutures till a string around the  
hernia and thus hasten the sep-  
aration.

Wounds of the Face. - Wounds of the  
eyebrow are generally superficial  
and require but little more than  
the approximation of the edges by  
a silver suture. These wounds how-

ever sometimes affects the superior  
betal nerve and cause neural-  
gia, and demand a division  
of the trunk. Wounds of the trunk  
are often attended with dangerous  
hemorrhage. The main duct of the  
Pancreal gland is sometimes opened  
we have a salivary fistula. The pos-  
tive dura is sometimes divided caus-  
ing Paralysis. Treatment. Allay hem-  
orrhage either by ligating the artery  
or by active compression. Burns of pm.  
air often give great trouble. The pm.  
air discolors the skin. therefore the  
sparks should be removed either at  
the time of the injury or after the wound  
has healed. a wash of Corrosive Sub-  
limate gr v to the g; is

In wounds of the tongue it may be  
regarded as always indicated to

approximate the edges even if they  
be lacerated. If maggots are pro-  
duced in wounds they may be re-  
moved by making a solution of  
leucosote 9*tt* to 100  $\beta$ . Turpentine  
may be employed, or indeed almost  
any stimulant. Burns wounds  
of the neck should not be closed through-  
out. These wounds never heal by  
the first intention.

Wounds of the Chest. Empyema is  
likely to attend either a pulmonary  
or a superficial wound of the chest.  
On account of the firmness with which  
the connective tissue is bound to the  
chest, a person may receive a wound  
with a bayonet or a dagger that  
may appear to penetrate the thorac-  
e cavity that has merely gone  
around the chest. These form super-

facial wounds of the chest. The air causing Emphysema may either enter the connective from without, or from the wounded lung where there is no external puncture - such as may occur from a piece of broken instrument entering the lung allowing the air to escape into the connective tissue.

A severe blow may lacerate the organs contained in this cavity, by simple contusion where there is no external wound. If the Emphysema be allowed to last the tissue will be so stretched as to prevent circulation and the tissue will slough. In this case the air must be allowed to escape by making minute punctures. It is bad practice to probe a supposed penetrating wound of the chest for in so doing we may punctuate the Pura previously not injured -

Hæmoptysis is not a sure sign of wound of a wounded lung. In particular women the lung does not collapse without the wound is as large as the opening of the glottis. Profuse hemorrhage is not likely to supervene wounds of the lung. General Pneumonia is not likely to follow a wound without any other disposing cause. Thuny is a rare result of a wound of the lung, "per se." Uncomplicated wounds of the lung usually heal without suppuration. Symptoms of penetrant wounds are deceptive, and there is no one that can be looked upon as conclusive. Complications.  
Intestinal hemorrhage. Symptoms. Paleness, difficult sighing respiration, weakness of pulse. Gurgling may be heard in the lungs. Pneumonitis.

or corner of the lung is another complication. This is a portion of the lung protruding out of the wound, at first this portion of lungs looks healthy, but soon becomes very brown. If the surgeon be called early he may push the lung back. Foreign substances driven into the lung, for example a piece of cloth or specula of rib. This may cause Empyema or Pleury. The Prognosis is much influenced by the strength of the patient. Treatment. Disphnoea may be relieved by external and internal stimulants. The wound must be closed as early as possible. Even if internal hemorrhage occur the wound should be closed. This will increase disphnoea. If the accumulation of blood becomes so great as to prevent breathing

a little of the blood must be al-  
lowed to escape. If the Interlo-  
cal artery be ruptured, it must  
be ligated. An artery of the lung  
can never be ligated. What then shall  
we do in profuse hemorrhage of the  
lung? Bleed!! This will bring on  
faintness, and decrease the force  
of the circulation and the wound  
will close and the hemorrhage  
will stop. As the patient recovers  
administer large doses of arter-  
ial sedatives - say Tinct. Acon. gtt V  
every half hour. This may prove  
too prostrating if so we must limit  
it. As to the treatment in  
Pneumatick - if summured soon  
after it has occurred we may be  
able to reduce the Hernia. Other-  
wise it will slough off. if this be-  
gins it must be assisted. Sum-

strangulate it by a silk thread,<sup>8</sup>  
thus hasten the separation.

Wounds of the Abdomen. Wounds  
of this region are very apt to be de-  
flected. Puerperitis is apt to suc-  
ceed these wound. Dressing the  
abdomen with flannel wrung out  
in very hot water and covered  
with oil silk will often prevent  
Puerperitis. In restoring a portion  
of protruding intestine after ligation  
should be resorted to. Bleeding is  
unadvisable in Puerperitis following  
wounds. The best plan of treat-  
ment is the "Opiate." Give no Purga-  
tives or Emetics. Gr<sup>t</sup> of Morphine  
may be given as a dose. This must  
be watched. Little food required.

Wounds of the Liver. There are a

very dangerous class of wounds  
but are not invariably fatal.  
In connection with these wounds  
there is most frequently Jaundice.  
When patients recover there is  
nearly almost always Hepatic  
abscess. Wounds of the Bladder  
are very dangerous and are  
always fatal. Wounds of  
the Bladder. The higher up these  
wounds are the less dangerous  
they become. Generally there  
is bloody urine in connection  
with these wounds. The great-  
est danger is Peritonitis. In  
all these wounds the first in-  
dication is to introduce a  
catheter and allow the urine  
to pass off as fast as possible  
into the Bladder. A Penal  
ostomy is made by the passing

of urine through the wound. The indication is to keep a Catheter continually in it, and stimulate the edges of the wound. Wounds of the Corpus Cervicis are usually attended with Severe hemorrhage. In wounds of the Penis it is necessary to keep a Catheter in the urethra. In wounds of the Scutum in which it is distended with urine it becomes necessary to puncture the scutum in a number of places allowing the escape of the urine. Wounds of the Bullock are frequently the cause of very troublesome hemorrhage. Wounds of the Stomach - are very dangerous but not always fatal. The indication is to close the wound and fasten the edge of the Lævulum of the Stomach to the parietes.

The Abdomen - Wounds of the Intestine. The indication is to close the wound. Use opium until the patient is completely under it - this must be continued, on an average, for 15 days. If the ligature is loose remove it, but never or take it away before the 5th or 7th day. Sometimes there will be an intestinal fistula, if this occur it becomes necessary to stimulate the walls of the fistula.

Fractures. Fracture may be defined as a solution of continuity in the bone, the result of mechanical violence. Varieties - Simple, Compound, Complicated. Longitudinal - Transverse, Radiated, Depressed - Oblique,

Comminuted. Causes of deformity.  
Longitudinal. Deformity by dislocation. Shortening and angular displacement. Impacted. From the action of the muscles the setting will often be displaced. Age influences the Prognosis very materially. The Endostium and Perosteum is necessarily fractured in every broken bone. The first stage in the healing after fracture lasts some 4 days. and is marked by swelling. The second stage lasts some 3 or 4 days, and is one of apparent inaction. The third stage or formative or knitting stage lasts some ten to twelve days. The fourth stage is the Hardening period, and the time is indefinite. The length of time for which a fractured bone should be inactive differs in different

fractured bones - In the Clavicle  
usually 5 weeks. For the Humerus 8 weeks. For the bones of the  
leg 8 weeks. For the Femur 12 weeks.  
Bone bones never unite by Cal-  
lus. The neck of the Femur, the  
Patella, the Cranium. Treatment  
after fracture. First remove  
the patient carefully from the  
seat of fracture. Next reduce,  
or set the fracture. Retain the  
bone in the proper position.  
Attention must be paid to the  
patient's bladder for it is not un-  
common that persons suffering  
from fracture are not able to pass  
water. The diet of the patient  
should be looked to. Nutrition  
dust should be used. Dr. Smith  
does not believe in the exhibition  
of Phosphate of Lime. Purgatives

should not be administered without arrangements are made for evacuation without the slightest movement of the patient.

### Line for the Ligation of Arteries

#### Primitive Carotid

Line high up. From sternal end of clavicle to Mastoid process - Sternocleido Mastoid Muscle. Muscle of Reference Sternocleido Mastoid.

Line low down. Same line - outer edge of Stern Thyroid - Tubercle of transverse process of 6<sup>th</sup> cervical is in front and a little inside the artery.

In the Sheath. Carotid artery - Par vagum nerve & Internal Jugular vein - The Brachioradialis nerve is on the front and outside of the sheath.

#### Singual Artery

Inner 1/2 inches from greater cornua line.

of the Hyoid bone parallel with  
the greater cornu - The Hypoglossal  
Nerve is just above - Reference  
Tendon of the Digastric muscle -

Facial Artery -

Line. Divide  $1\frac{1}{4}$  inch oblique from the  
inferior edge of the Masseter mus-  
cle to the angle of the mouth -

Temporal Arteries

Line On the root of the Zygomatic  
process two lines in advance  
of the ear -

Sub-clavian Artery -

Line. Parallel with Clavicle, or  
perpendicular line from apex of  
the Omno-clavicular Triangle, or  
Supra-clavicular Fossa - Mus-  
cle of Reference - Scalenus Anticus  
inserted into the tubercle of the  
first rib -

Axillary Artery -

Line.  $\frac{3}{4}$  of an inch from anterior border of

Axilla, or junction of its anterior & middle third. Muscle of Reference. Coraco Brachialis. In the sheath. Axillary vein. Median ~~vein~~<sup>nerve</sup>. Inter-  
nal cutaneous artery. Ulnar and Radial nerves - counting from Coraco-  
brachialis.

### Brachial Artery

Line. From junction of anterior & middle of axilla to point inside the tendon of the Biceps at elbow. Reference. Inner edge of Biceps muscle at the middle of the arm. Coraco-brachialis high up. Median nerve next to Muscle.

### Radial Artery

Line. For upper third. From  $\frac{1}{2}$  inch outside the middle of the bend of the arm to a point on the outer side of the forearm  $\frac{2}{3}$  inches lower. Muscle of Reference. Anterior muscular space between Supinator

Radii longus - & Pronator Radii  
lives. inner edge of Supinator  
line for lower third. From same  
point as elbow to the inner edge  
of the Styloid process of Radius -  
Muscle of Reference. Outer side of  
tendon of the Flexor Carpi Radialis.  
Ulna Anterior

line. From Internal Condyle to  
Radial side of Pisiform bone. or from  
inner edge of the tendon of the Biceps  
to the junction of upper and mid  
dle third of ulnar and thence to  
Pisiform bone. Muscle of Reference  
At middle third Junction of  
Flexor Carpi Ulnaris & Flexor Sub-  
limis or first Intermuscular  
space outside the free margin  
of the Ulna. At wrist. Exte-  
nal border of <sup>inner</sup> Flexor Carpi Ulnaris.  
Ulnar nerve on inner side and  
a little behind.

### Pecten Iliac Artery

Line. Parallel with and  $\frac{1}{2}$  inch above Poupart's ligament from Ext. Abdominal ring to 1-2 inches above crest of the Ilium - stretch the connective tissue between Peritoneum & fascia.

### Cervical Iliac Artery

Line. From  $1\frac{1}{2}$  inch from Anterior superior Spinous process transversely towards External column of the External Abdominal ring - being on its inner side - Be careful not to injure the Peritoneum -

### Femoral Artery

Line. From middle of femoral artery to posterior & internal parts of condyle of Femur. For upper part Scarpas Triangle. Middle part Inner edge of Sartorius. Muscle of Reference. Sartorius muscle runs inner side of artery -

### Posterior Tibial Artery.

Line from middle of Popliteal space to foot, half way between the Internal Malleolus & Tendo Achillis.  
Muscle of Reference. High up - Inner edge of Solens. Low down - Tendon of the Flexor profunda - 8  
Tibialis posterior

### Anterior Tibial Artery.

Line. On the foot, from middle of space between head of Fibula & spine of Tibia. To the middle of the Phalangeal space. Muscle of Reference. Tendon of 1st Extensor hallucis communis, outer side of tendon of Extensor proprius Pollicis. On leg. Same line - Muscle of Reference. Tibialis anterior, or first interosseous or longitudinal interspace from spine of Tibia -

Fractures. In a fracture of the Clavicle the indications are to raise the shoulder up, turn it back and pull it outward. This cast may be done by placing a pad in the axilla which will act as a fulcrum. In a fracture of the neck of the Humerus it is indicated to bear an angular splint on the front of the arm, and a flat one to the back and outside of the arm, and a pad in the axilla. In a fracture of the length of the bone it is indicated to make extension and counter extension, and apply an angular splint in order to keep the elbow at rest, and two small splints to the Humerus no pad in the axilla. The fracture of the condyles of the Humerus is usually caused by direct violence. The spiral of the upper extremity must

be applied - and the arm is to  
be allowed to lie on a pillow  
until tumefaction has ceased.  
and then an angular splint must  
be very carefully padded and  
applied. This angle must be  
changed at very drowsy intervals  
in order to prevent abnormal ad-  
hesions. Fracture of the olecrani-  
on is usually caused by di-  
rect violence. Fractures of the  
bones of the forearm impair the use-  
fulness of the hand. There is little  
tendency to shortening even in  
fractures of both bones of the fore-  
arm and none whatever in  
fractures of only one bone. The  
splints used for this fracture  
should be wider than both  
bones of the forearm, and long  
enough to reach to the ends of  
the fingers. These splints must

be padded wider in the middle  
than at the sides. At the end of  
3 weeks the arm may be carefully  
pronated and supinated, in  
order that the callus may not  
interfere with those movements.  
"Barton's Fracture" commences in  
the articulation of the Radius &  
extends upwards. A bursa in  
the front of the wrist generally be-  
comes much enlarged and han-  
dled and often makes the Barton  
fracture appear to be a mere lux-  
ation. We must next the influ-  
ence of the extensors, next we  
next the abductors of the Thumb.  
The Patella may be fractured in  
two ways, transversely and vertical-  
ly. The transverse fracture is usually  
caused by excessive muscular act-  
ion. The vertical fracture is generally  
in consequence of direct force.

In fractures of this bone, we must elevate the whole lower extremity and keep the limb straight - In Fractures of the Bone of the Pelvis we have little or no displacement, and indeed we have little displacement in any fracture of the Pelvis - little need be done other than to insure rest in bed, and attention to the rectum and Bladder, and proper attention to inflammation - Fracture of the neck of the Femur is not uncommon especially in the aged - In order to make the diagnosis in this injury - the limb should be circumducted and the other hand applied to the great trochanter will discover that it describes a very small arc - the limb may be extended and if it is a fracture it will fly back and be as

short as before - this is not the  
case even in a luxation - One of  
the most certain signs of this in-  
jury is the very great pain caus-  
ed by the surgeon's manipulation  
much greater than in a luxa-  
tion - The union between  
the parts in this fracture is usually  
fibro ligamentous - The Prognosis  
should be very guarded - Very  
little more is done in this fracture  
than to flex the thigh - The double  
inclined plane may be employed  
when the fracture is high up in  
the length of the bone - The straight  
splint is the best in fractures of the  
length of the bone - If we only  
have one bone broken in the  
leg there is but little displace-  
ment or shortening - Fractures  
of both bones of the leg when  
caused by direct violence is

apt to be at the same place  
in both bones. And if not  
caused by direct force the  
view is likely A fracture  
high up in the Tibia is apt to  
injure the articular which at  
this place perforate the Inter-  
osseous membrane - for this  
reason Gangrene sometimes  
follows this injury. In  
treating fractures of the Tibia  
we should first prevent re-  
laxation of the limb, and secondly,  
by counter the disjoining of  
the parts of bone. If we  
wish to gain the Posterior  
~~we should~~  
Indications Reduce the dislocation  
as soon as possible. Thirdly  
Resort to some means that will  
ensure the retention of the bone  
in the proper position.

3rdly - Combat that excessive inflammation  
4thly - Prevent Ankylosis  
We may have four dislocations  
in the Hip Joint - One upward  
and backward - one downward  
and backward - one upward  
and forward, one downward  
& forward - The upward and  
backward is the most common  
variety - In this ligation we have  
shortening some  $1\frac{1}{2}$  or 2 inches.  
In the backward dislocations  
the legs are turned inward  
or have a tendency to do so. In  
the forward dislocations the  
reverse is true - In the up-  
ward and backward ligation  
the main muscles to overcome  
are the rotatory.

Cervalgia - Hip Disease - Most  
common in the young - Caused

The Scrofulous or Tuberculous  
disease - It is also caused by  
various trifling circumstances - such as over exertion -  
Movement gives pain - The  
joint will be particularly  
painful in the morning -  
Sometimes the child refers the pain to the  
ankle - This may mislead  
the Surgeon. The particular  
position of the limb will  
stretch the Internal Lateral  
Ligament of the knee joint  
and this fact explains the  
cause of the pain referred to  
in this joint - In back of  
the thigh can not touch the  
head at the same time, this  
is a very valuable diag-  
nostic sign. After Atrophy  
has taken place in the Glu-

the muscles the bullock will  
become flattened. At length  
the parts about the hip become  
stiffer and shiny. Aseptic  
fluctuation may be felt, giving  
no evidence of abscess. See  
the four supraventricular which is  
well marked. The discharge  
in Ichneumone. Treatment —

Proper motor. Anodine. Vi-  
nities. In the first stage  
leaps or Seesles should not  
be applied, but this does  
not hold good in the sec-  
ond stage. Cool water oil.  
The application of Davis'  
splint.

Injury of the Genito-Erinary  
Organs. Dysthymia or  
Inflammation of  
these organs is called Gon-

nervosa - Inflammation  
going on to ulceration is  
called Syphilis. Poophilac-  
tic Treatment "Keep out of  
the way of temptation".

Urinate immediately after  
connection. Perform ablation.  
Sheathes give but a false  
security. Salicinoids post  
coitus may be introduced  
into the urethra, or if this  
be not at hand we may  
inject a solution of the nit.  
rate of Silver go  $\frac{1}{2}$  but these  
remedies should not be  
used when much inflam-  
mation be present. It is  
not well to begin treat-  
ment in this way of the  
patient be not presented  
within 48 hours after con-  
nection. A very cooling

injection is the following

~~Phlegm~~ <sup>and</sup> Croupy goat  
Aqua              pt 1

Yolk of one Egg-

Gg - S inject -

Bunatas must be employed  
and the bowels Rept open.  
In the inflammation along the gyle  
a hip bath should be given.  
An injection of the Balsam of  
Cape Verde is very beneficial.  
In order to prevent leorder we  
administer Opium - or Camphor  
or we may combine the two.  
Epididymitis when it occurs  
usually comes on in about  
Two weeks - when it begins the  
proper treatment is to  
apply leeches - if further  
developed we should put  
leeches on the line of the con-  
corners of the whole scrotum.

## Phymosis

by adhesions - Para-phymosis and Phymosis are sequelae of Gonorrhoea. The treatment of Phymosis is to slit up the prepuce at the junction on a circular structure of the Urethra - another sequelae This must be treated by the introducing of different sized Rings - this must be done very few days for some time. Warts another sequel of Gonorrhoea which may be treated if small by snipping them off and cauterizing the blood vessels with Argent Nit. If the warts are swollen they may be washed by a camel's hair pencil over very slightly with

Nitric Acid - it must then  
be washed off well and  
alkaline <sup>solution</sup> solution. This will  
dry up the want.

Chancery. A disease caused  
by the introduction under the  
skin of an ichinous irritating  
pus, which forms an ulcer  
which ulcer may be of two  
kinds - either soft & semiliquid  
or hard. The difference between  
a soft and hard Chancery is  
that the first is caused by  
a comparatively mild virus,  
while the latter, or hard Chancery  
is caused by a highly de-  
veloped and extremely irritab-  
le virus. Gonorrhoeal pus will  
not produce Chancery  
Treatment. If there when  
is a pustule it must be

strangulation of the piles by the wire ligature and the double caudala is the best operation. Dr. Smith has only known of one instance in which the piles returned after having been operated upon in this way. That was an instance of a relative of Gen Scott, who was obliged to lie in the saddle for many hours together during the Mexican campaign.

Deformities. Pes Equinus. where the toes are turned downwards. This is always connected with valgus which is the turning in of the toes. Pes Taillis or the turning up of the toes is

always combined with bad  
gas. or the turning out of the  
legs. Treatment. Restore  
the proper position as soon  
as possible, and assist in  
the development of the mus-  
cles of the weak side. It is  
well to wash the fur in a de-  
lution of Oak Bark - in order  
to make the skin hard that  
it may not chafe from the  
use of the proper instruments.

Curvature of the Spine - Latras.  
Most common in girls. In  
milding rachitis often  
and expected when this  
disease - makes the relative  
heights of the shoulders. Lat.  
real curvature is purely a  
muscular disease and  
is always unconscious

with disease of the bone -  
Treatment. Increase  
the development of the  
muscles on the weak  
side

Diseases of the eye. We may  
know leprosy from  
Schistosomiasis by the differ-  
ent distribution of the  
vessels in the parts. In  
leprosy the vessels  
are seen to anastomose.  
The vessels in the Schisto-  
soma do not anastomose  
and are straight. She-  
mosis is a serious infil-  
tration in the sub mucous  
cellular tissue of the eye.  
Scrofulous Leprosy.  
Should be treated with  
applications of Argent

Nit. gr.  $\frac{1}{2}$  to the P.<sup>s</sup>. - Godber  
oil. Drn. Tonic. Sun-  
shin. Exercise.

Puerperal Ophthalmia - Occurs  
in children but recently  
born. Treatment Argent.  
Nit. gr.  $\frac{1}{2}$  or 1 to the P.<sup>s</sup>.  
~~Gomorrhocal~~ Ophthalmia.  
Treatment. First the lid  
wash is clean. Paint the  
lid with Argent Nit.  
go  $\frac{1}{2}$  to 1 to the P.<sup>s</sup>.

Scleritis. Scleritis exists  
without conjunctivitis.  
causin. such as those which  
would cause Rheumatism.  
Treatment. Purgatives.  
Dover's Powders. Counter  
irritation.

Gonritis. Inflammation of

the corner causes a reduction in the tension  
spasm of the part.

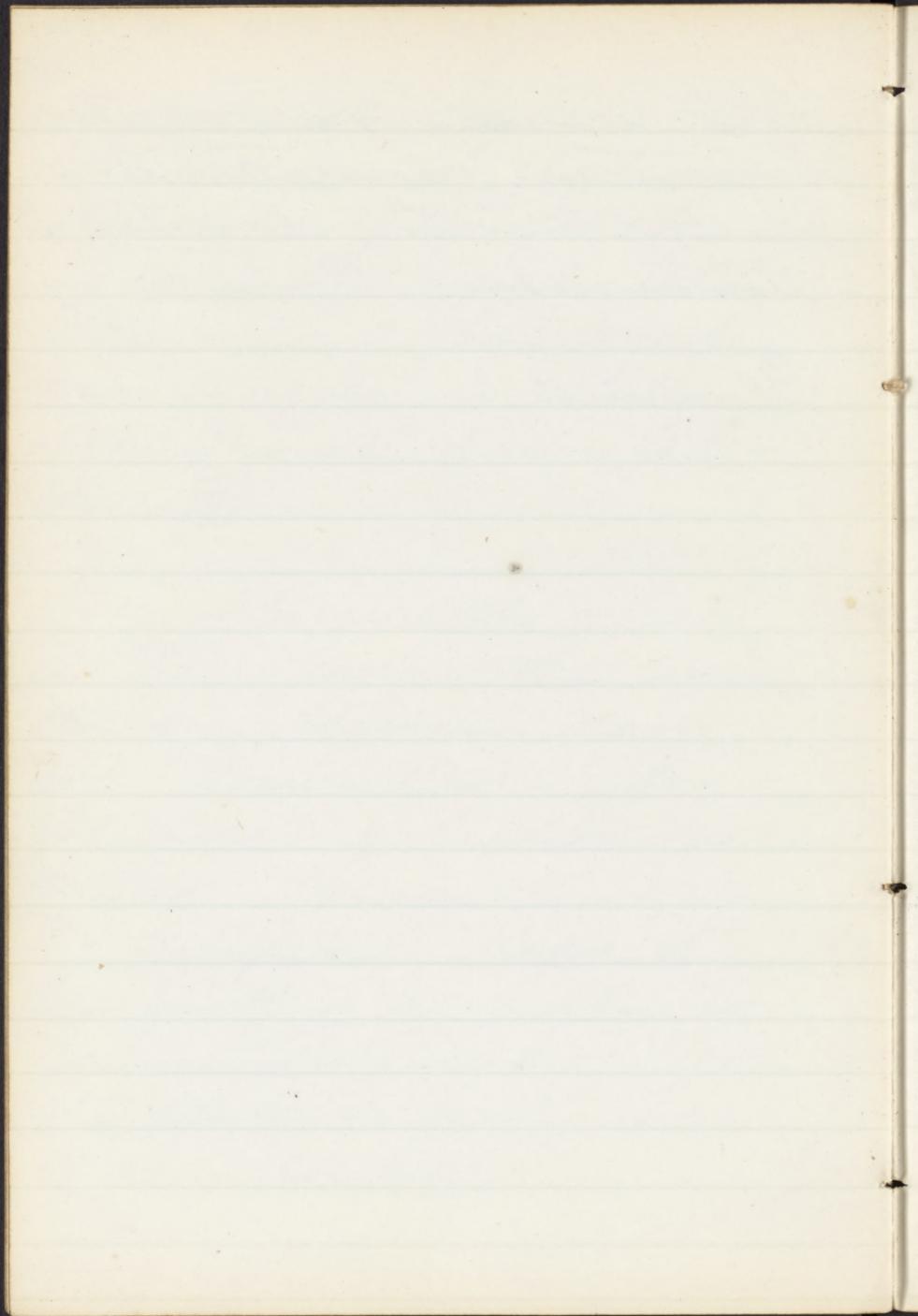
Treatment. Apply to the  
corner, with a fine camel's  
hair pencil, a solution  
of the Nitrate of Silver & S.  
with Pt.

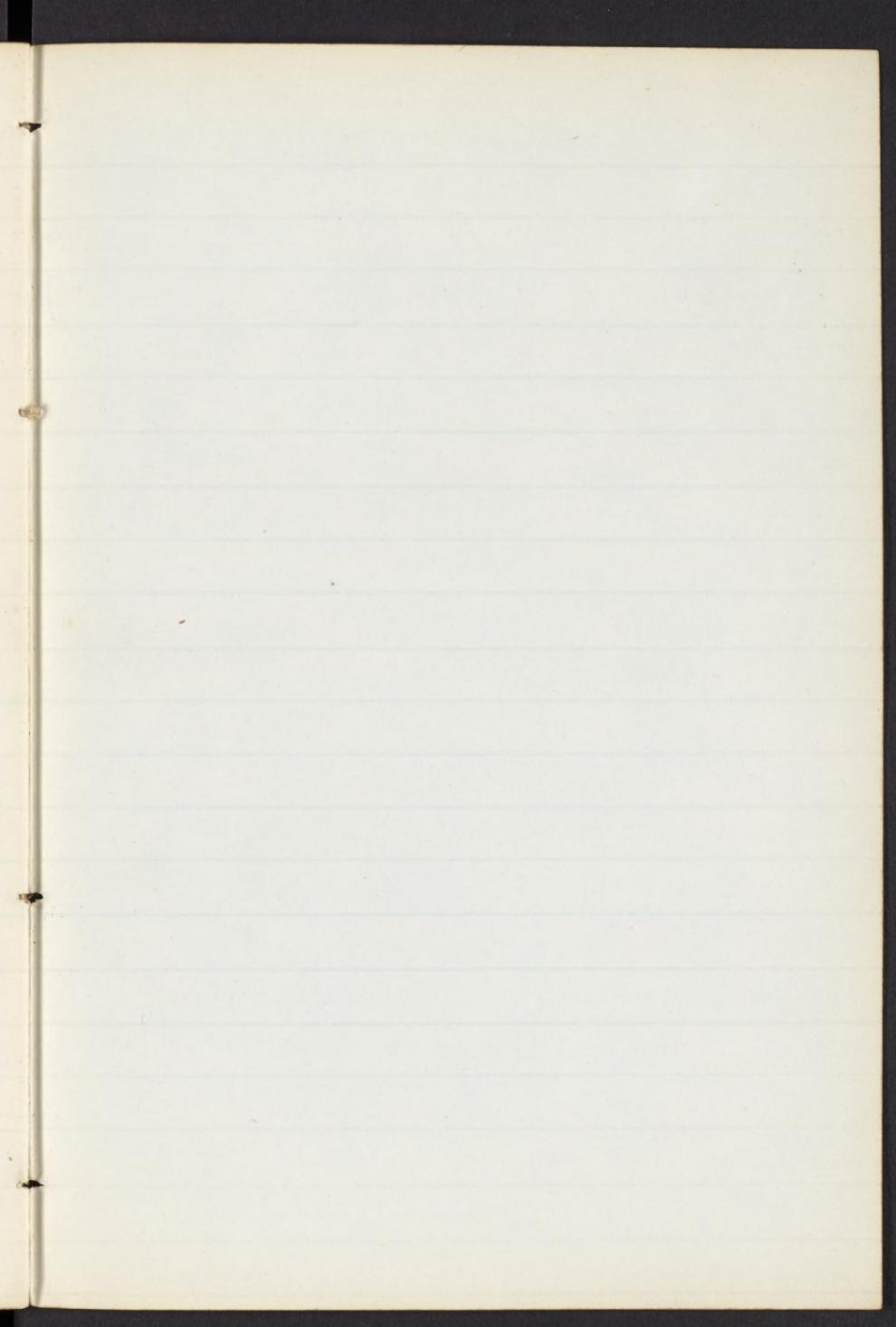
Itch. Increased vasodila-  
tory - change of color  
the eye becomes dark  
or Great Pain - In-  
tolerance of light - treat  
most dilate the pupil  
by Atropia - cups to  
the back of the neck - Pur-  
gatives - No occasion for  
the specific influencer  
of mucus.

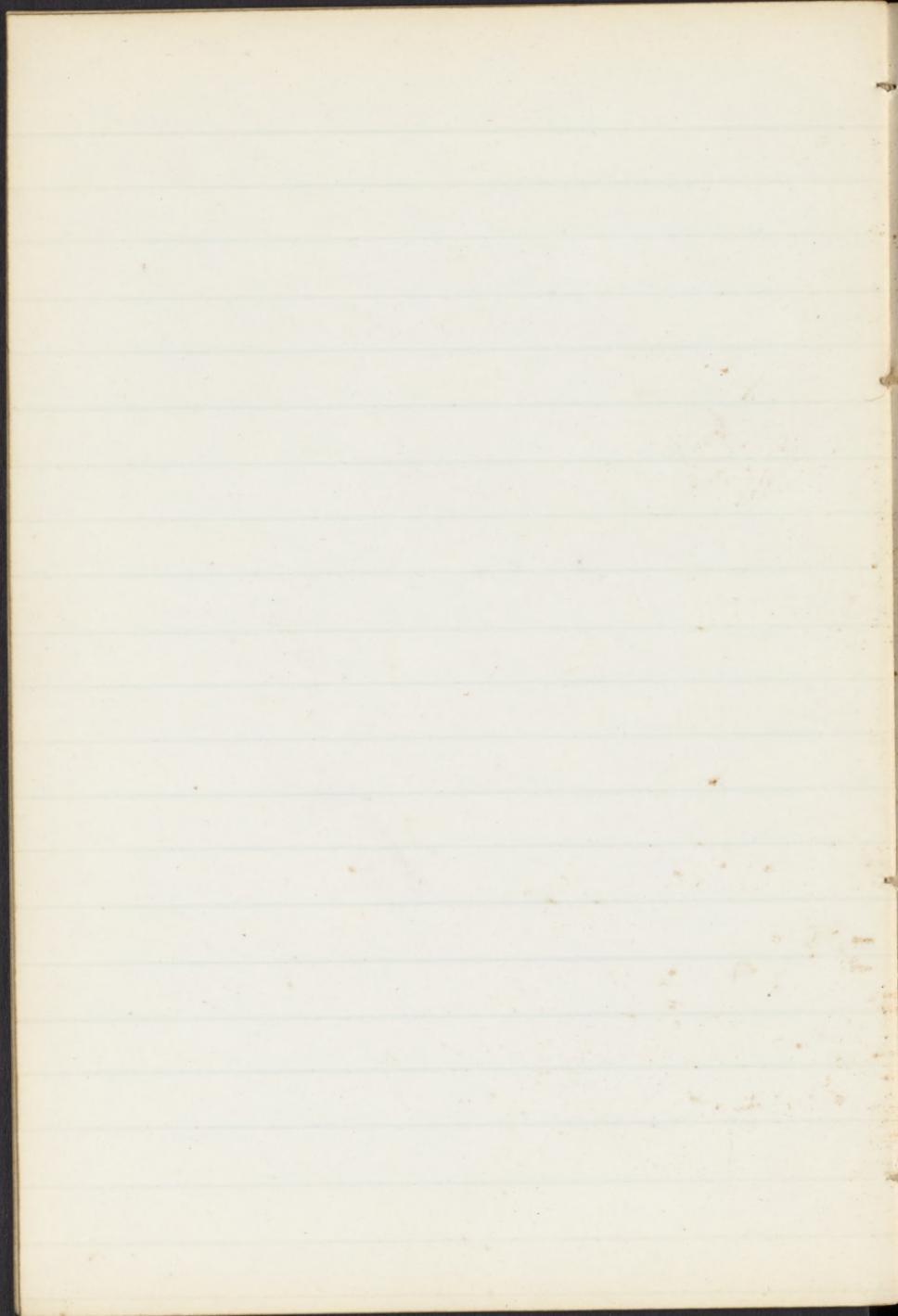
Choroiditis. The choroid

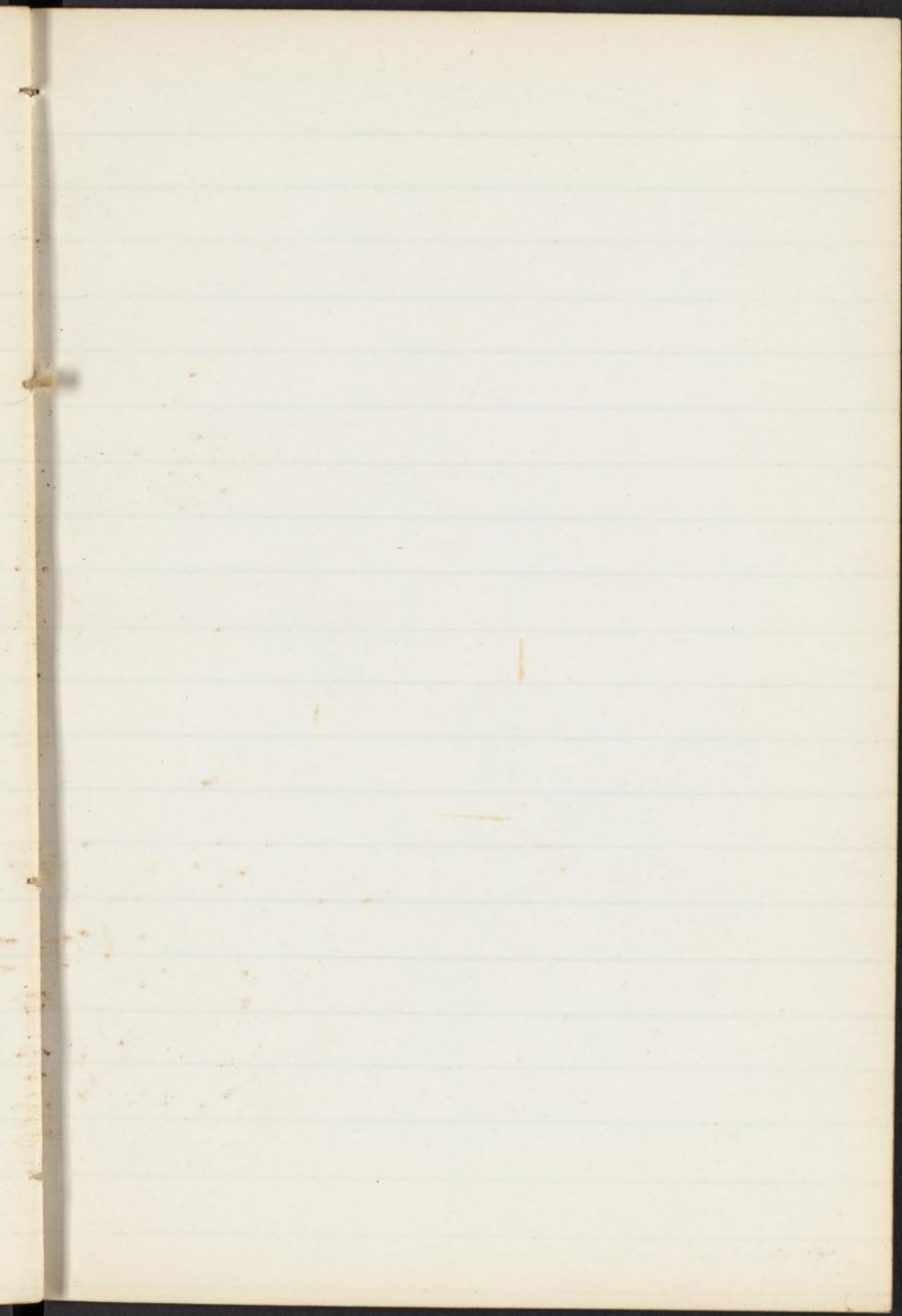
coat is very vascular.  
Local anesthetic - Semitoxic  
Antiphlogistic Semitoxic  
Stimulant.

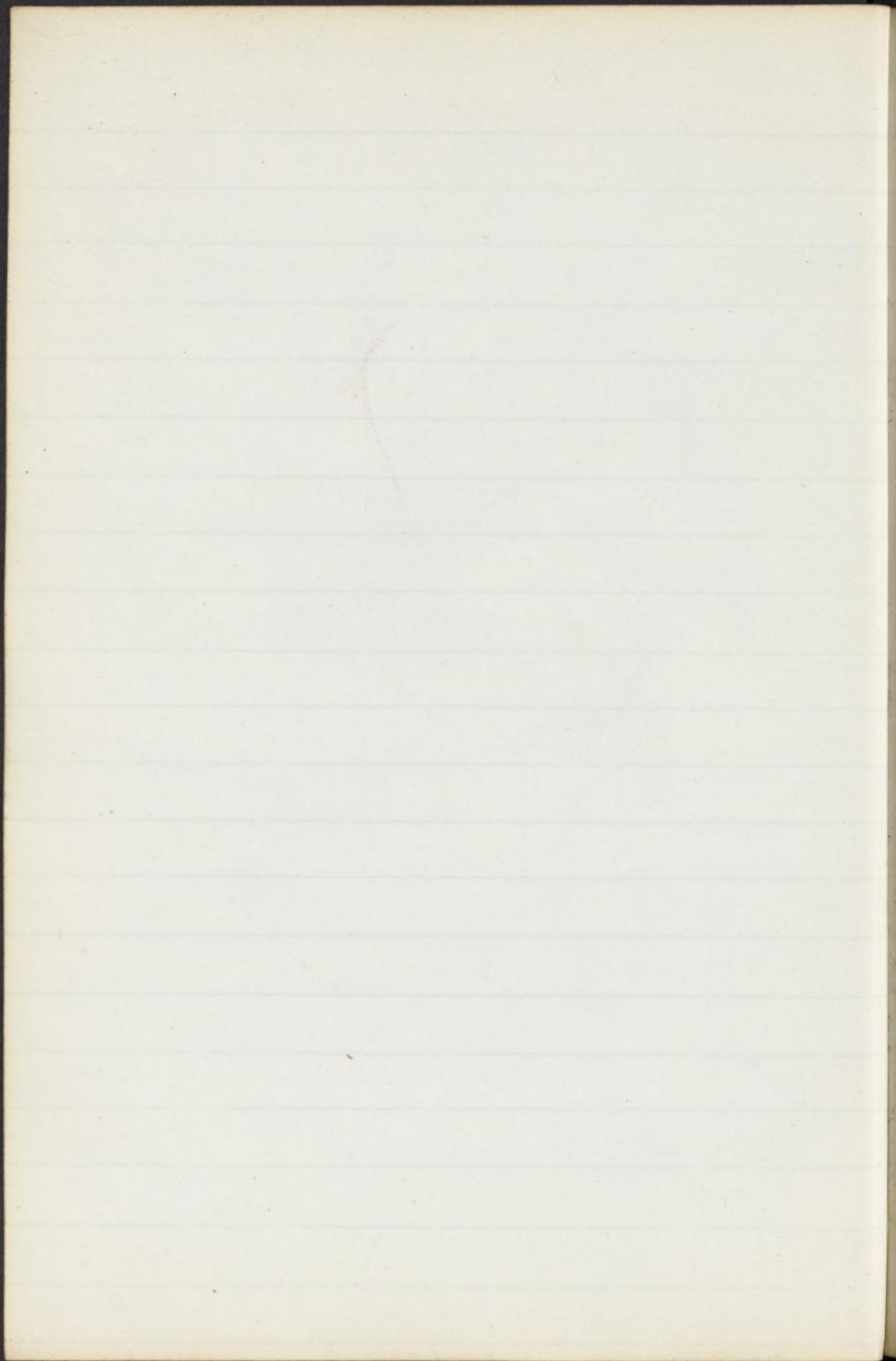
Glaucous.

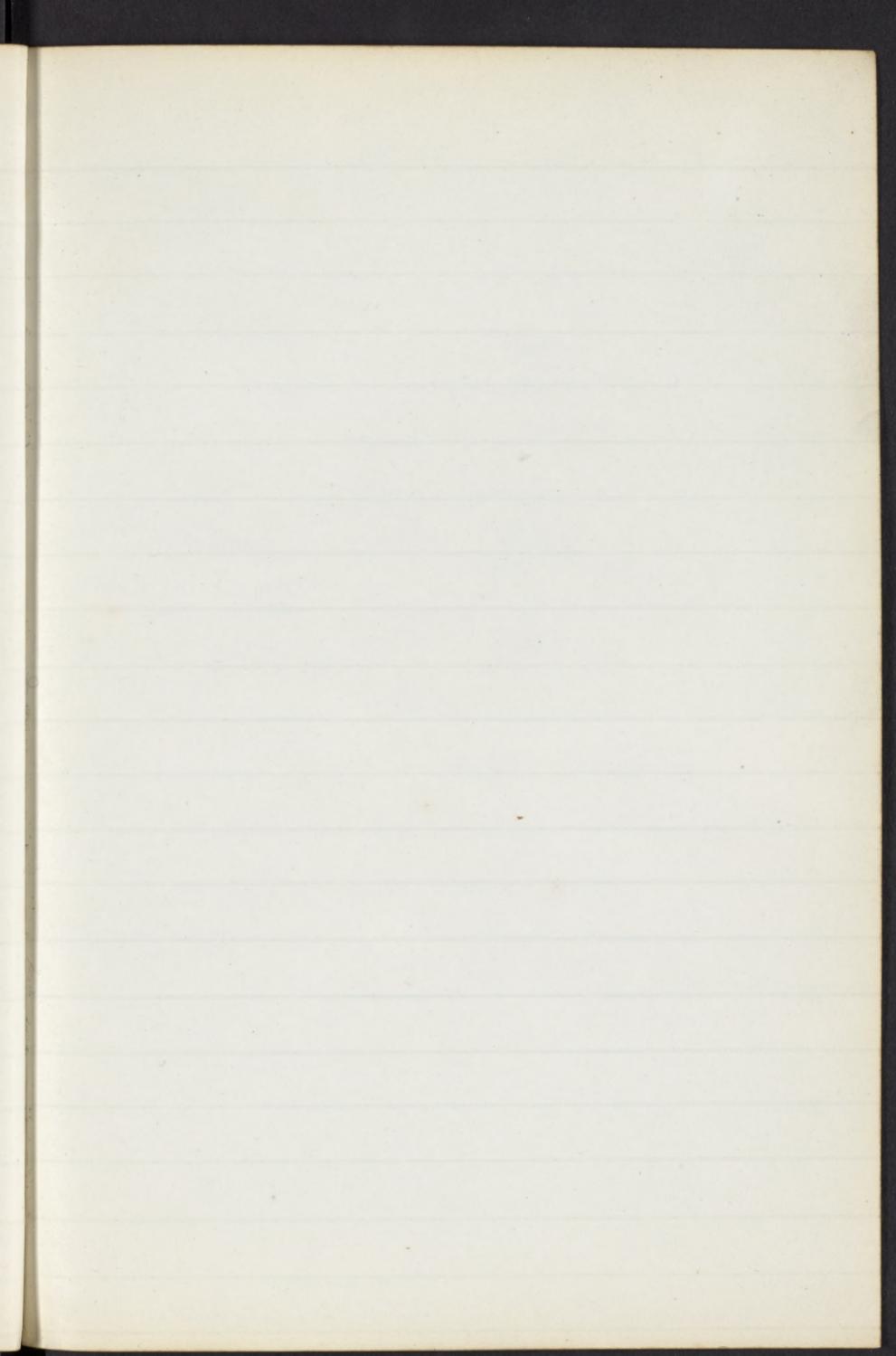


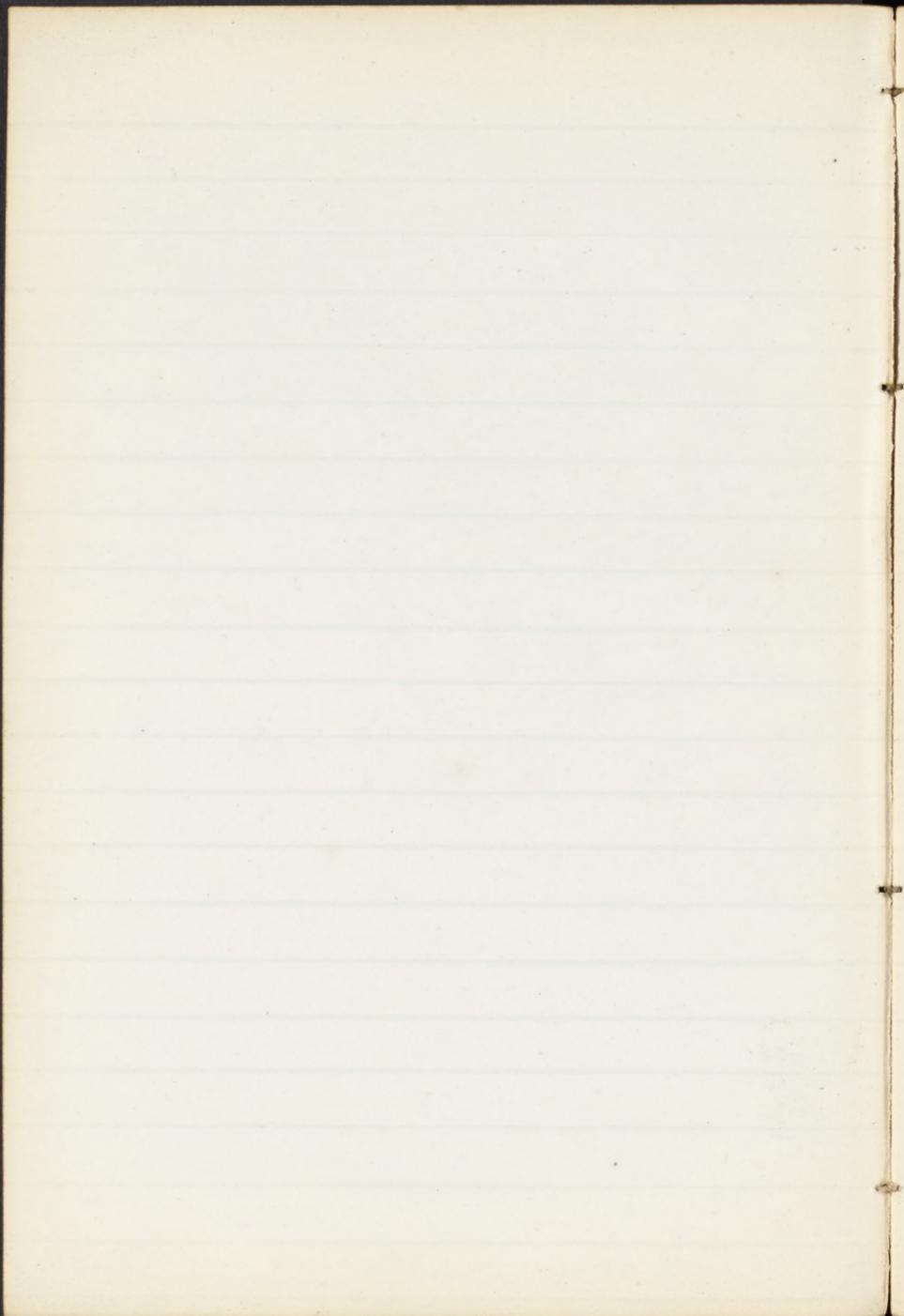


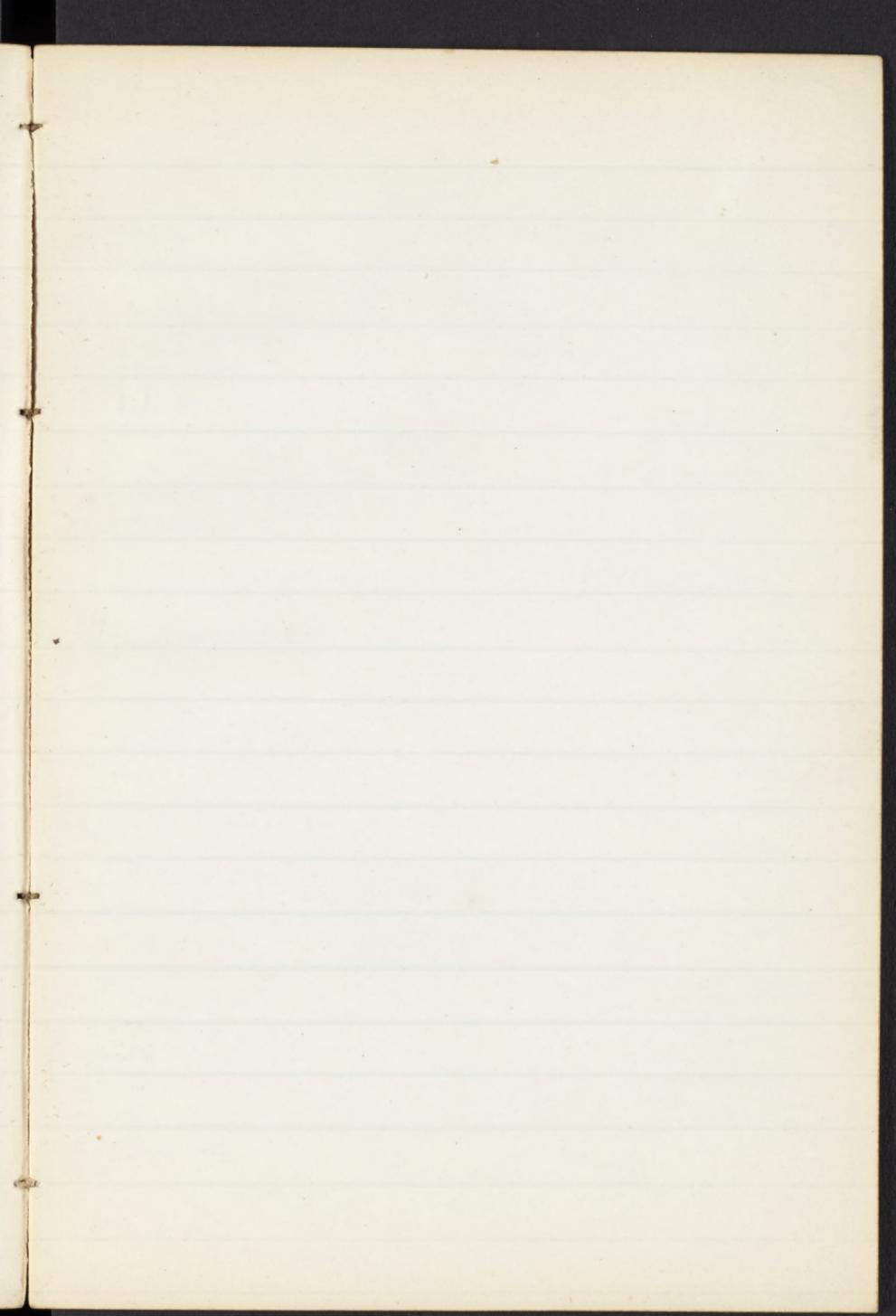


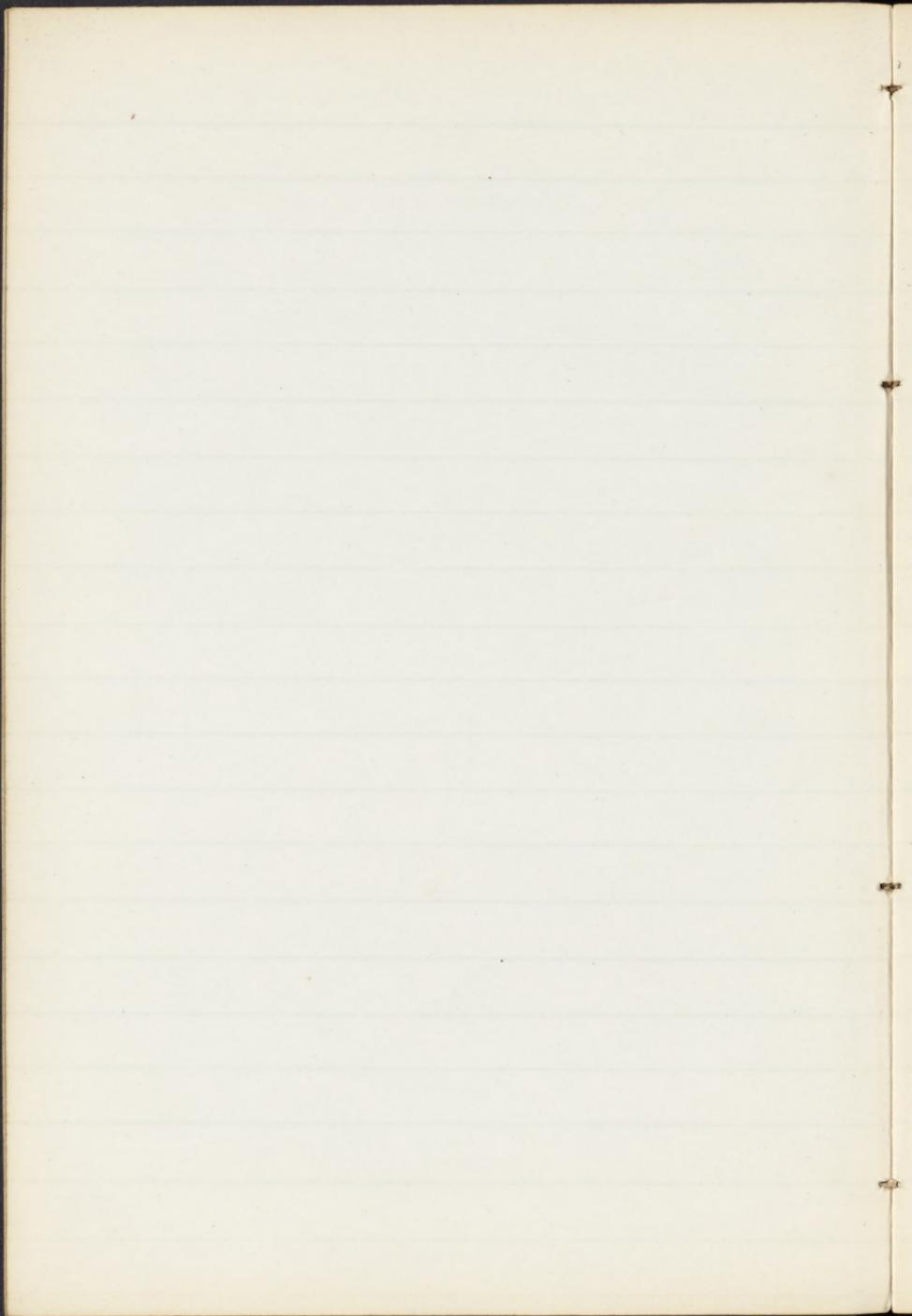


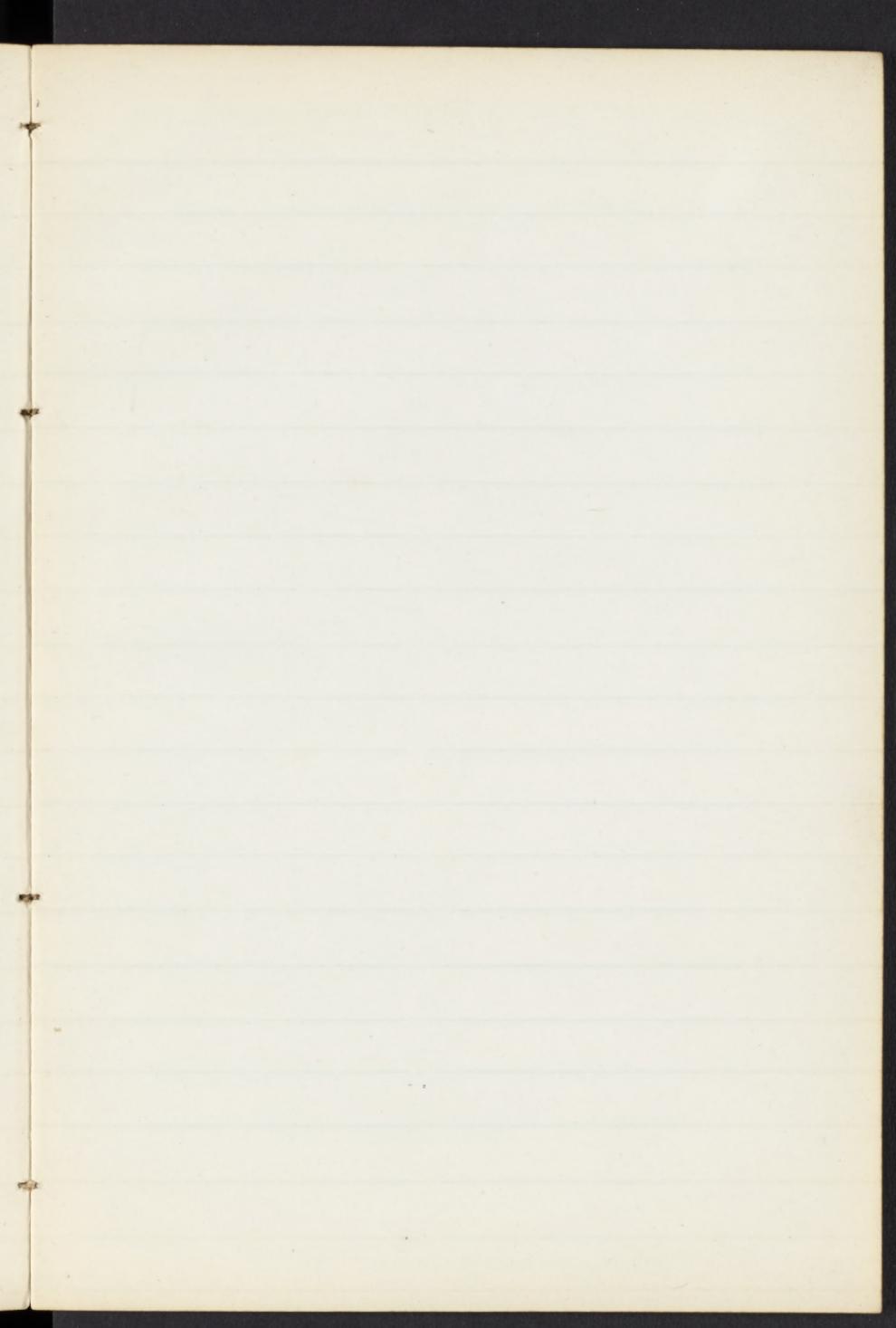


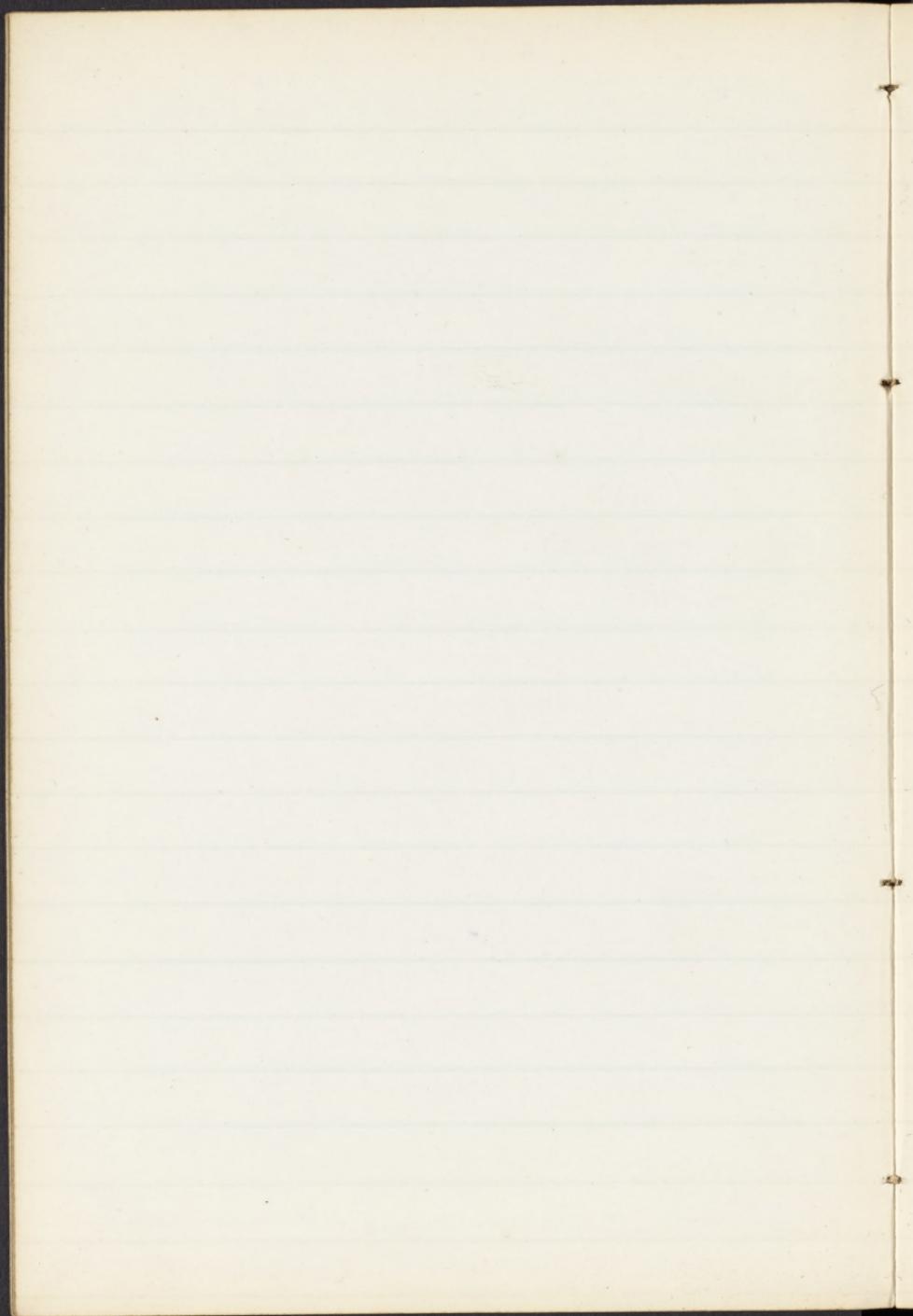


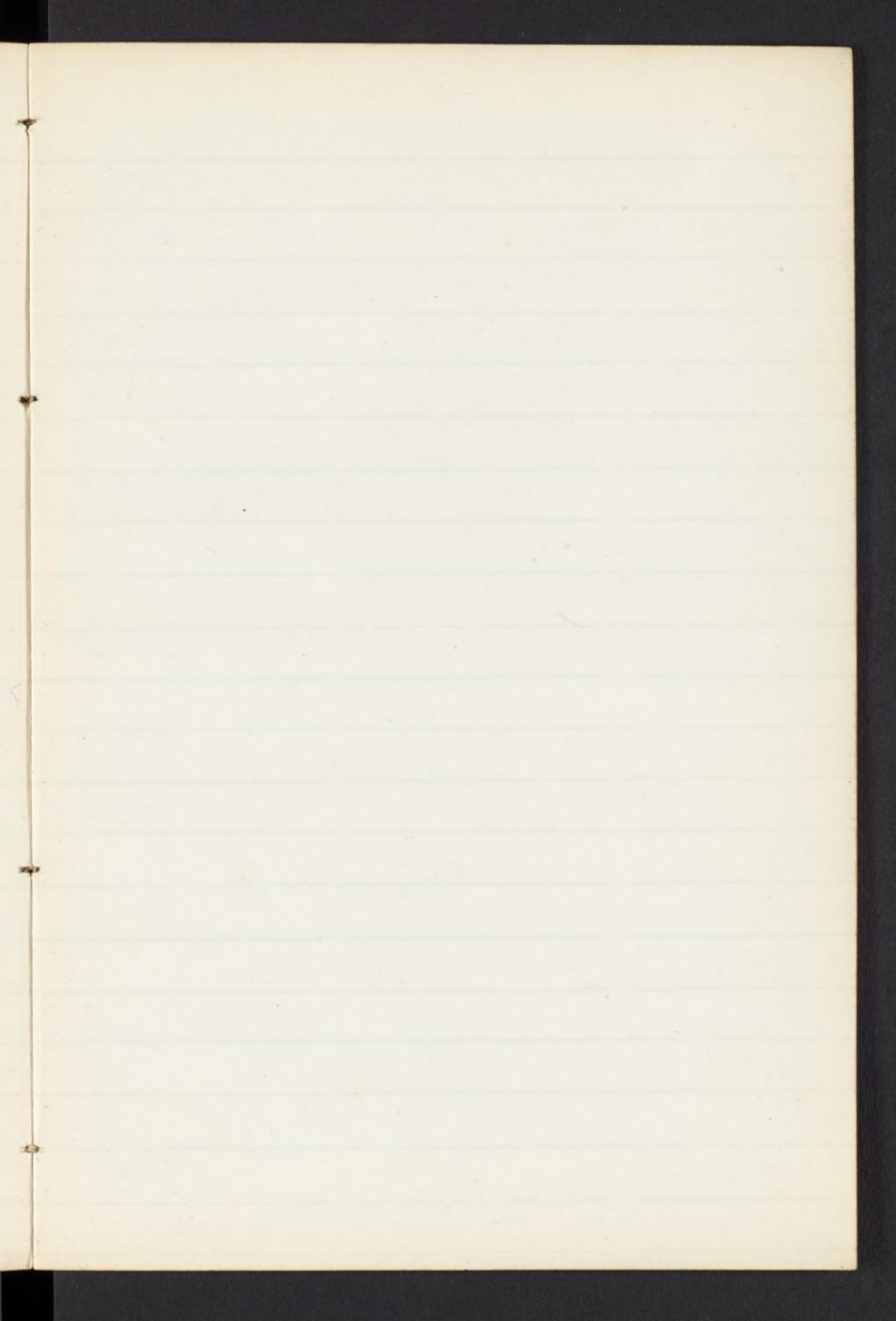


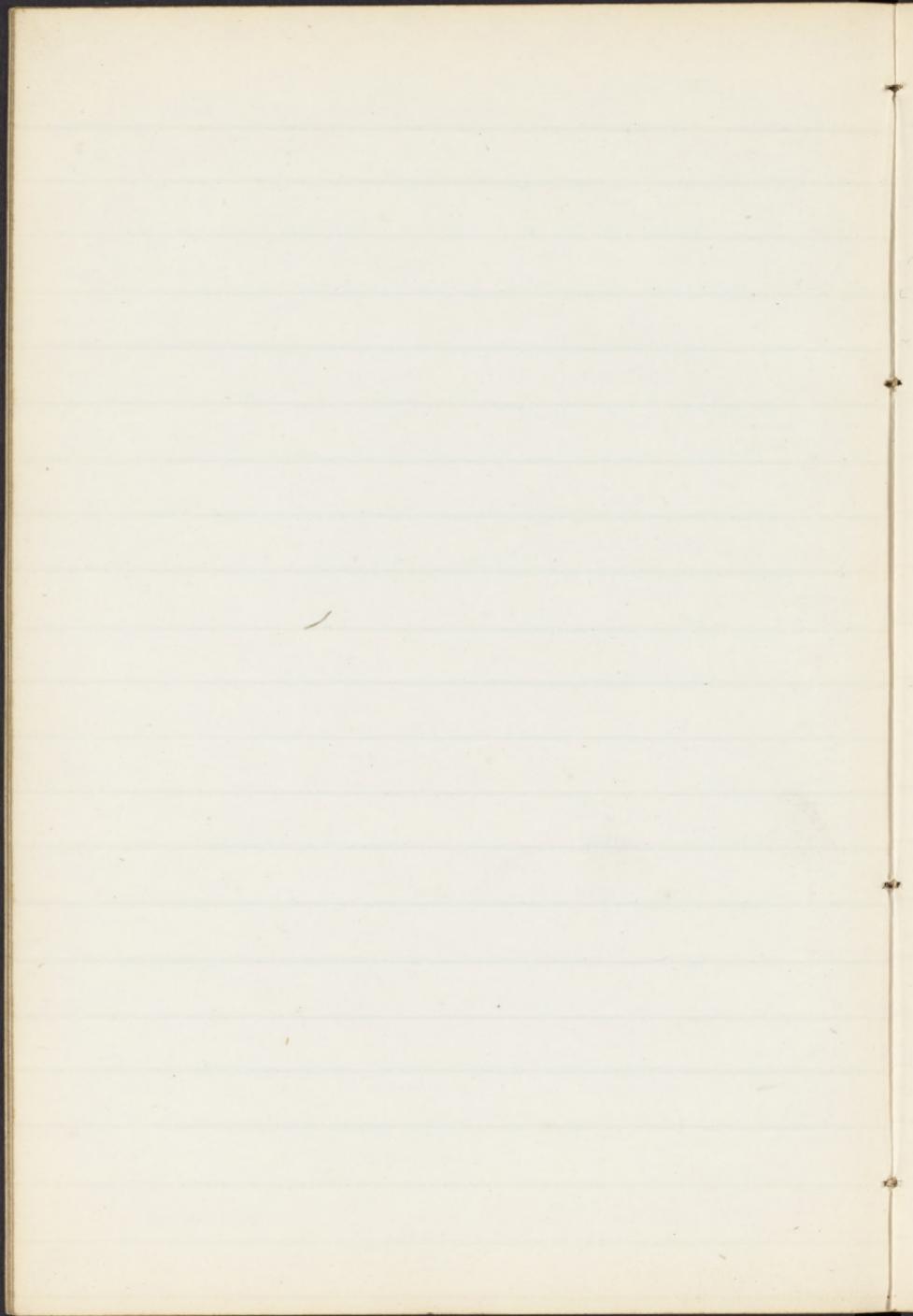


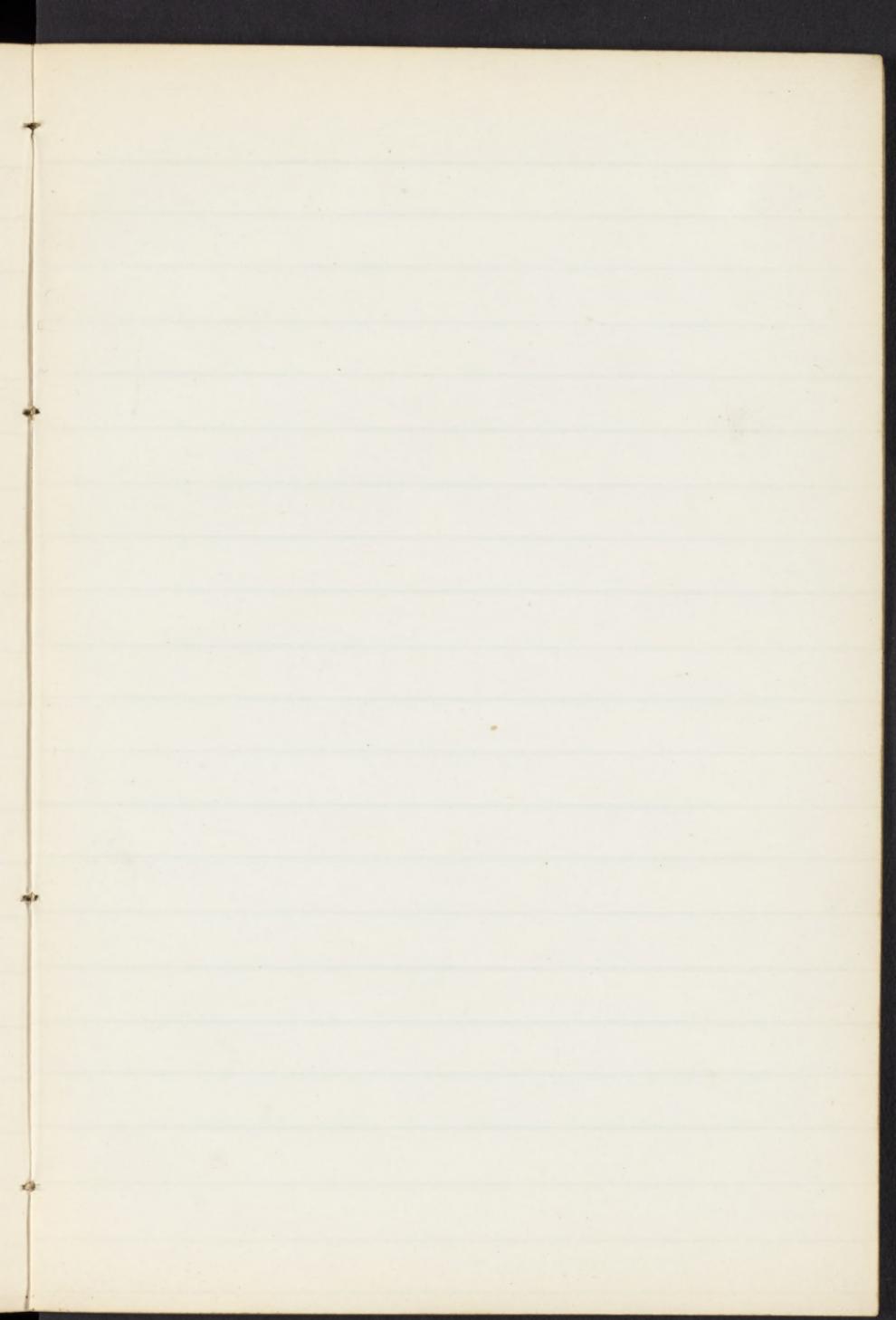


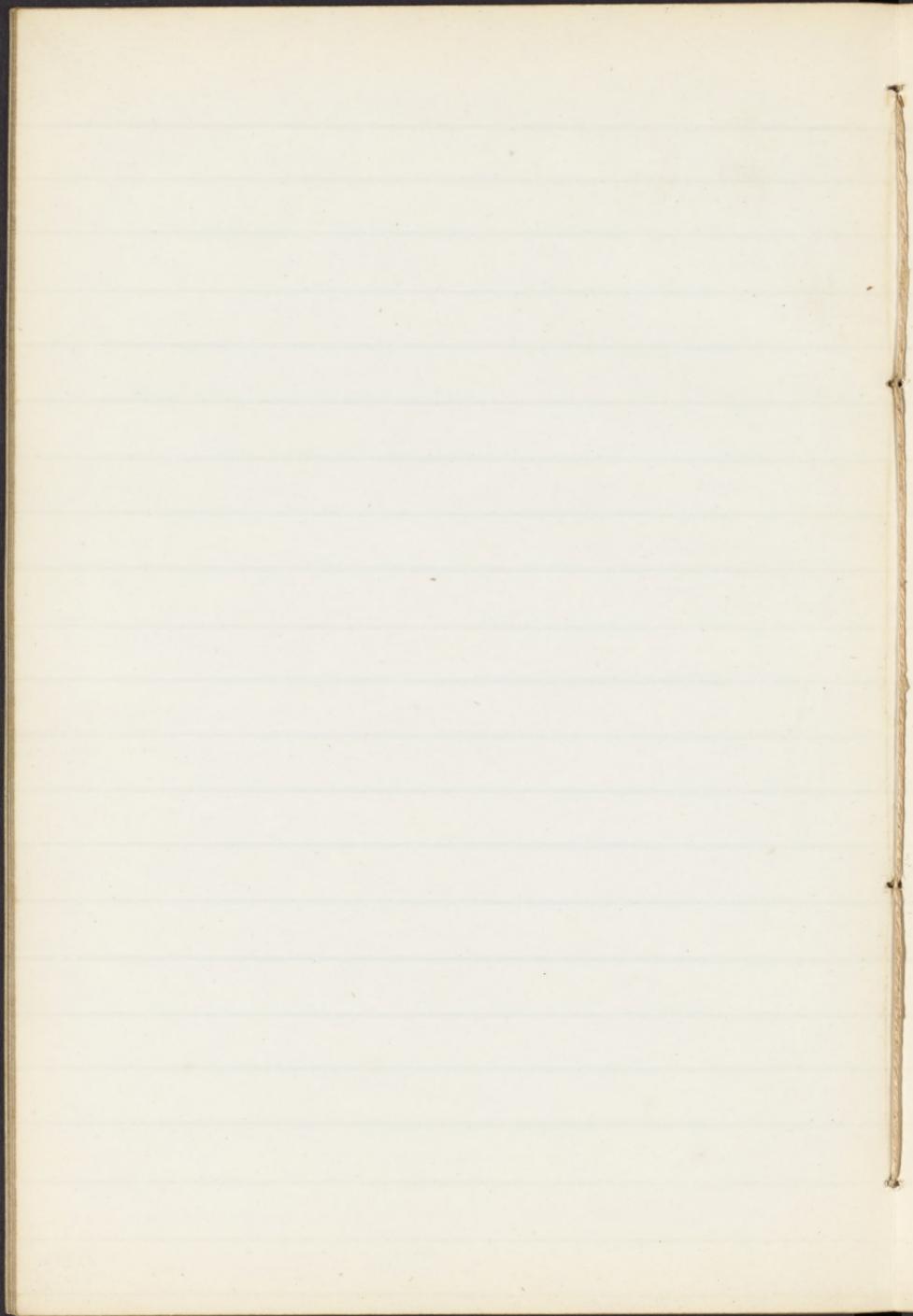


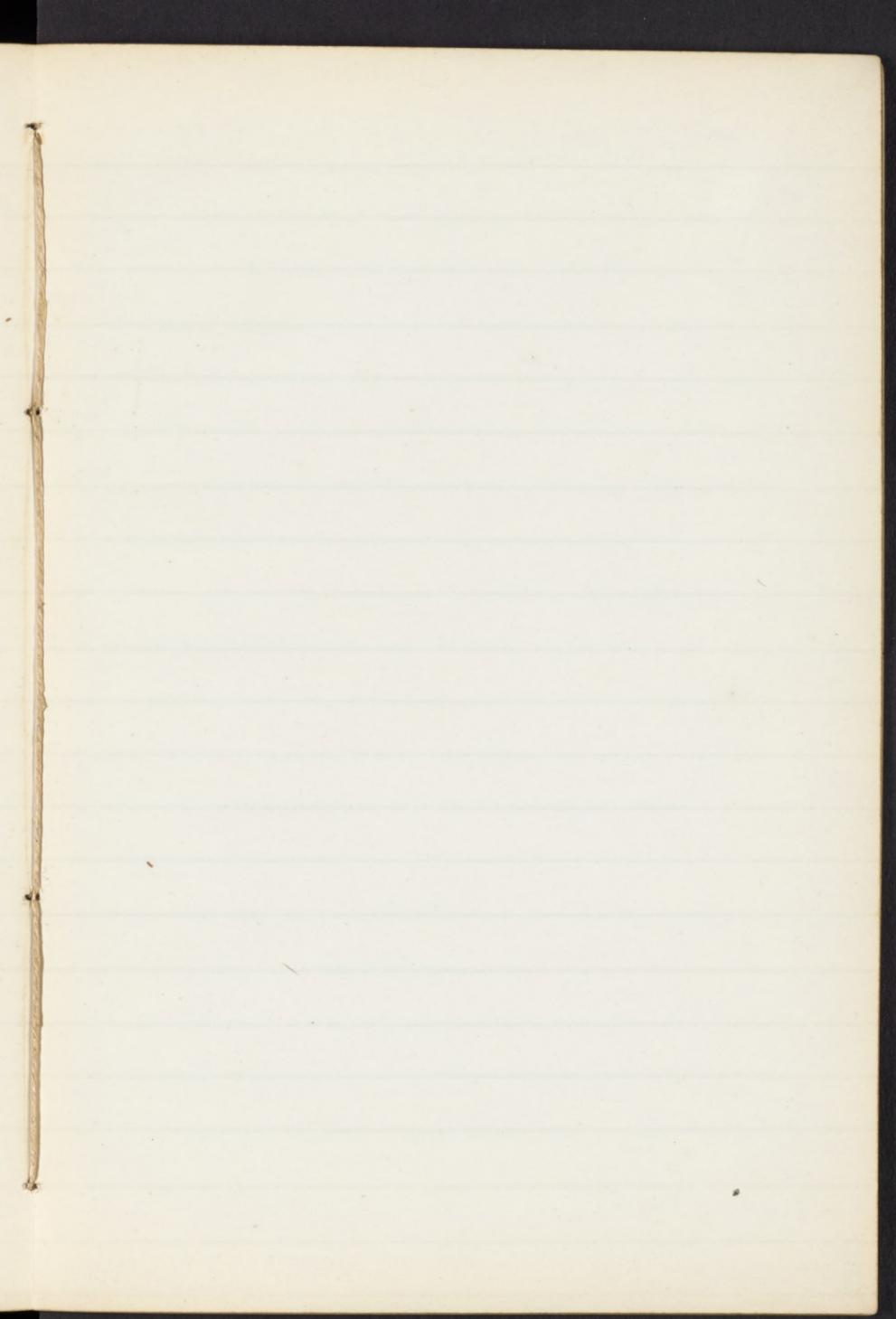


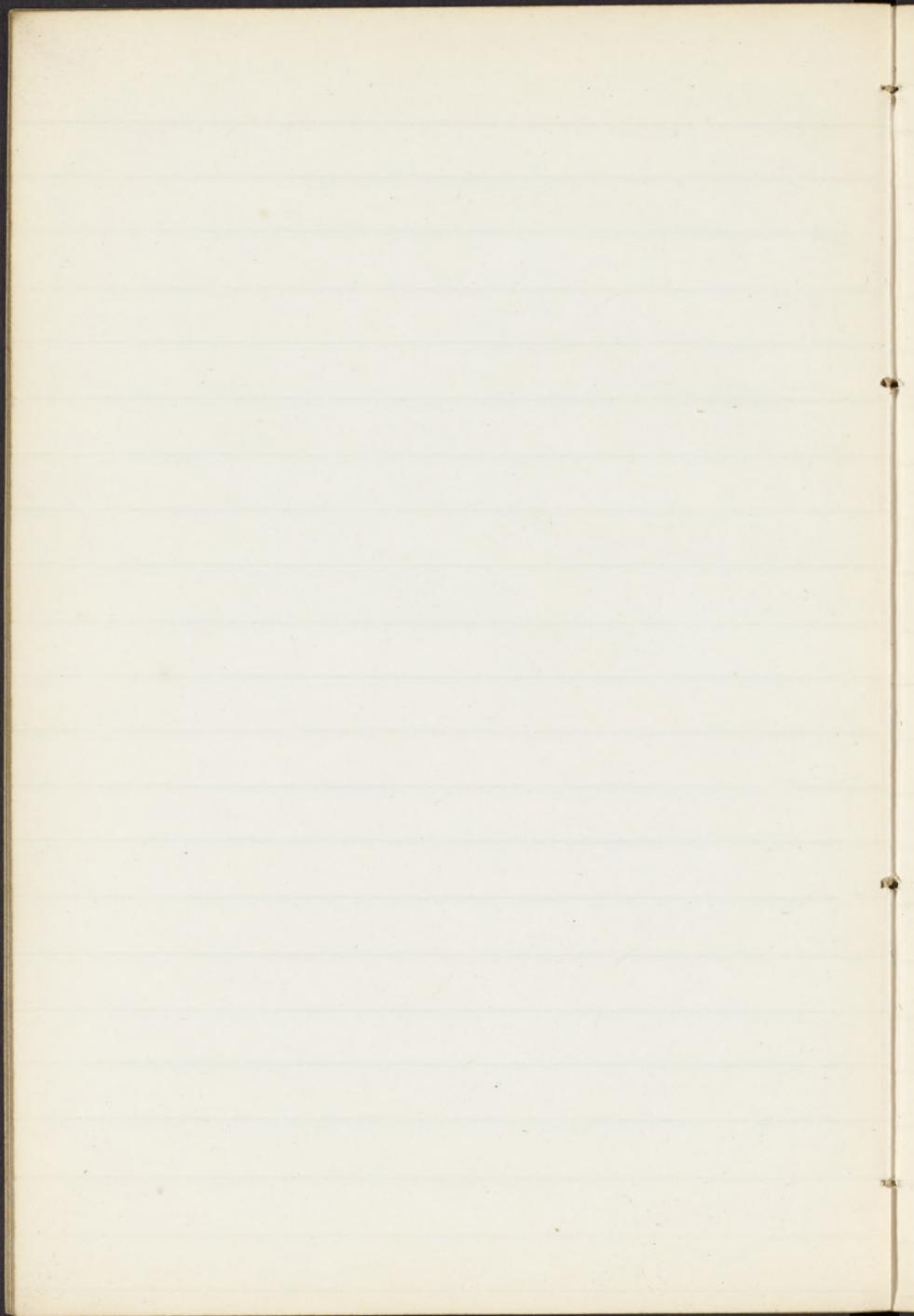


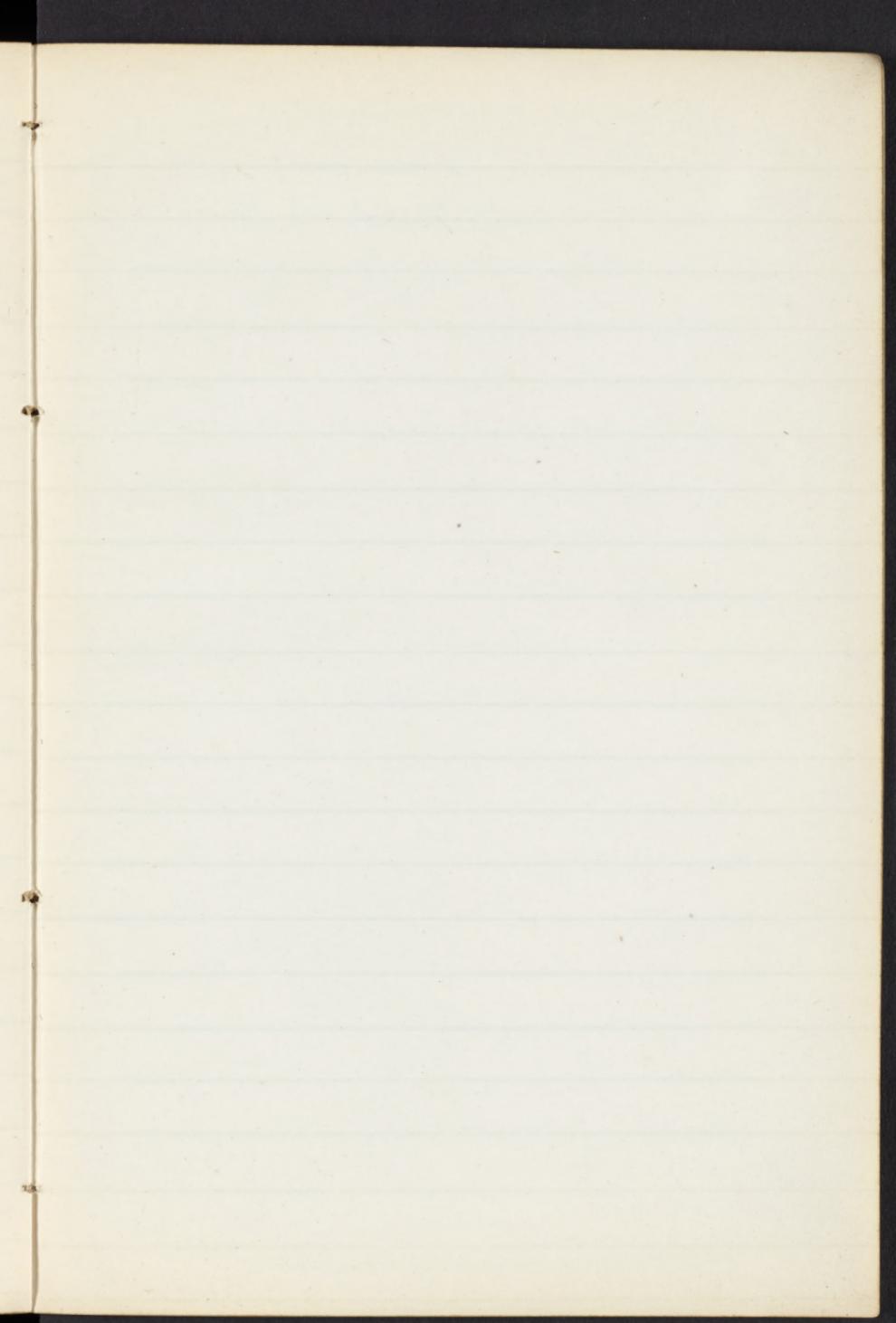


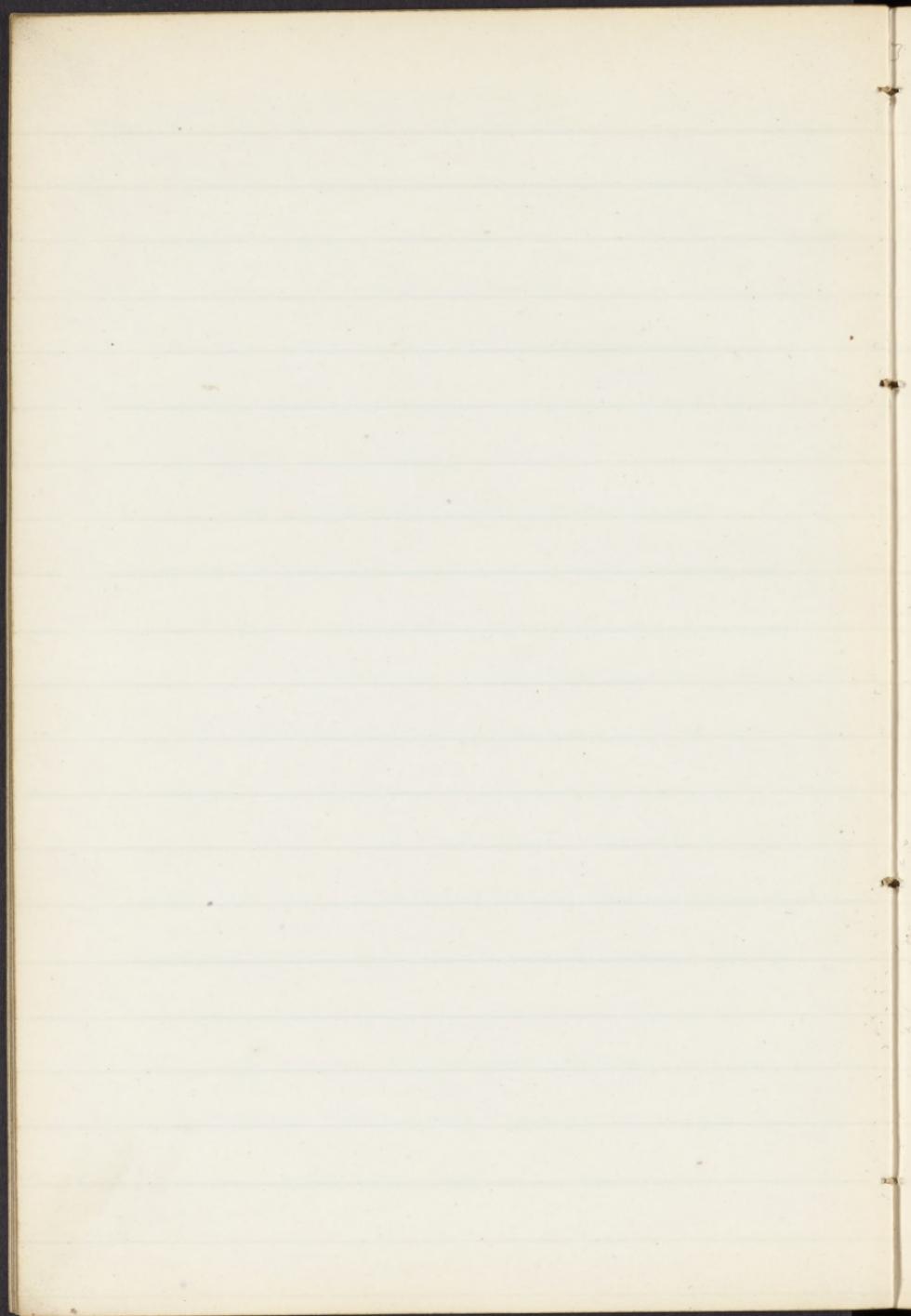


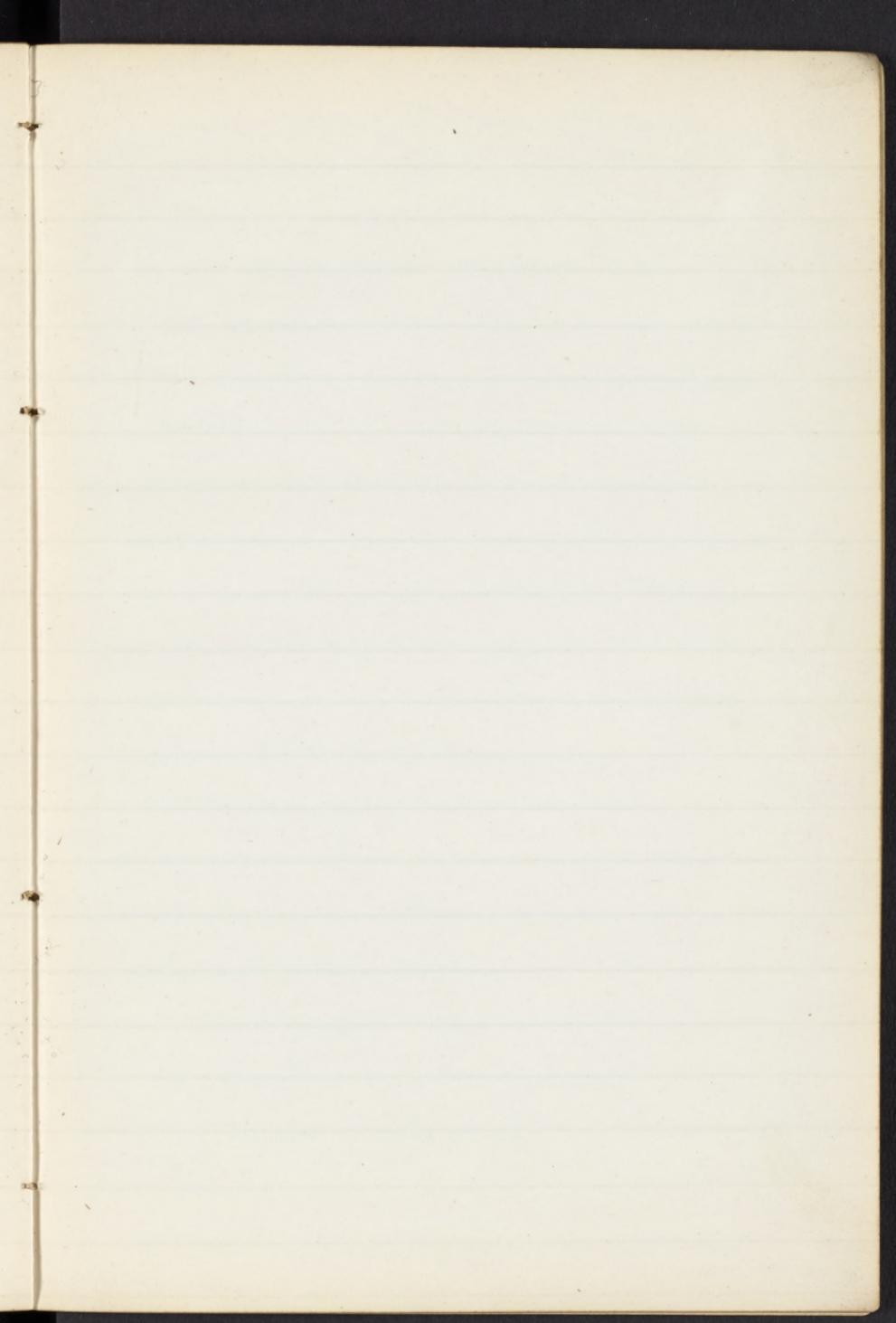


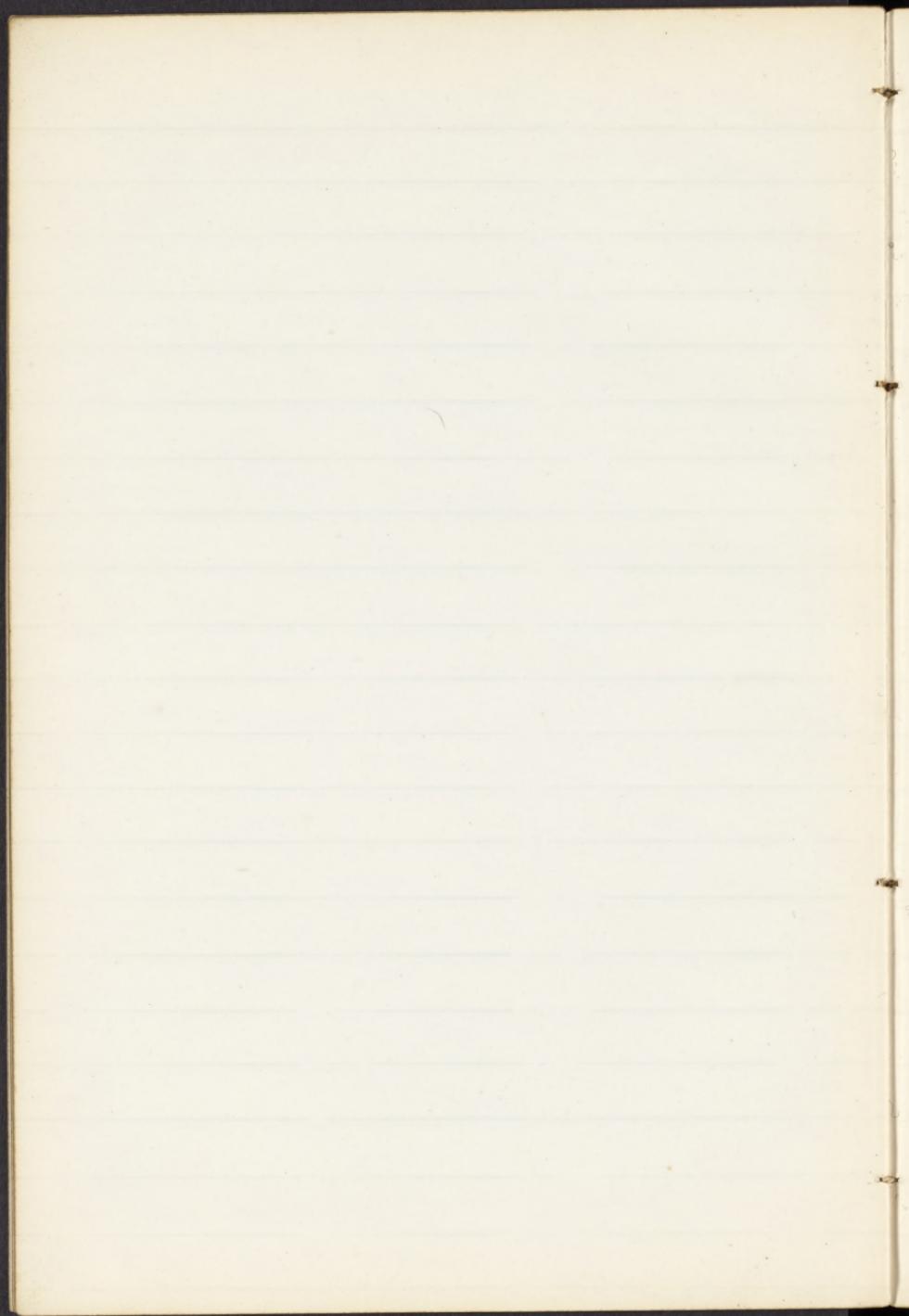


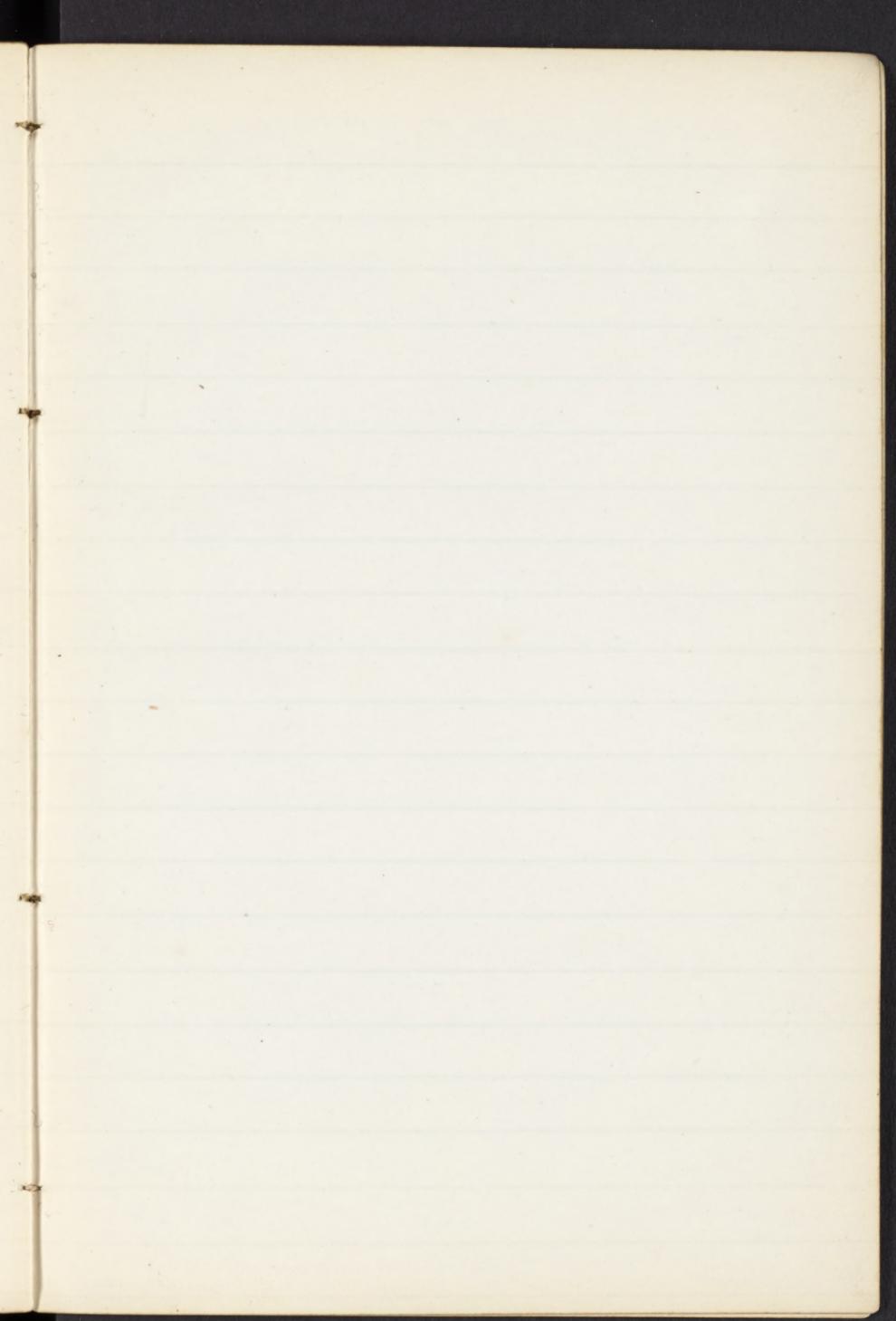


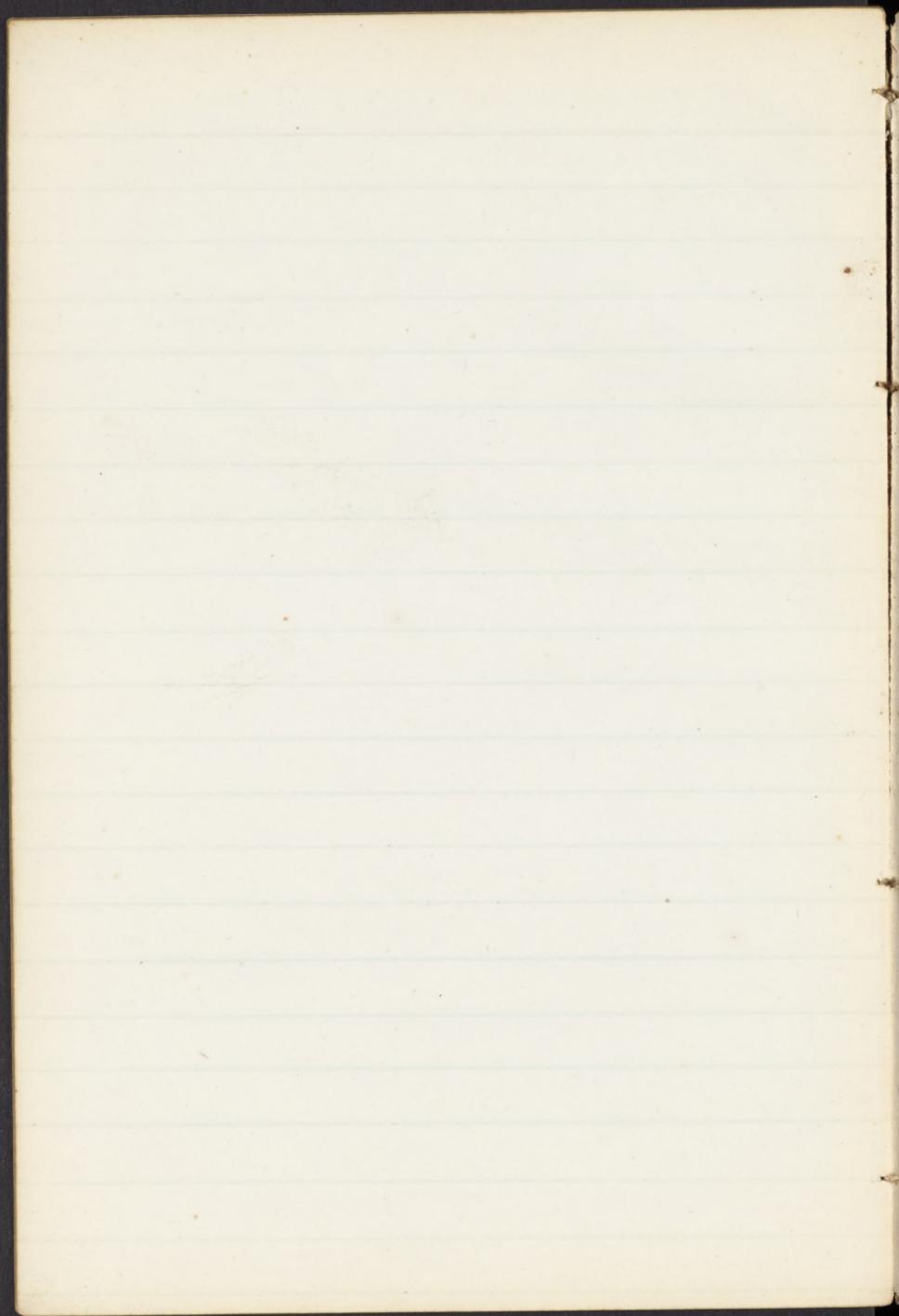


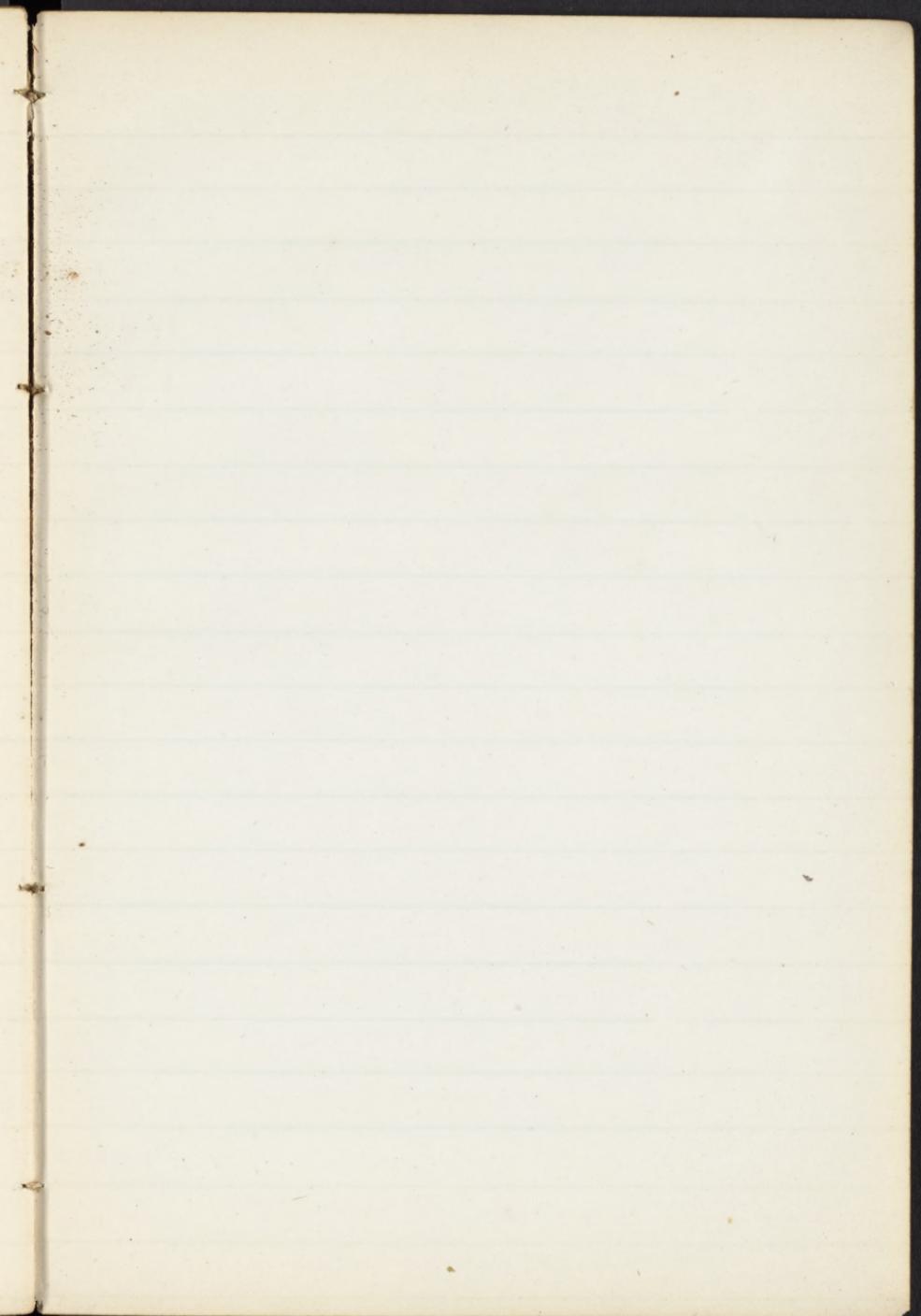


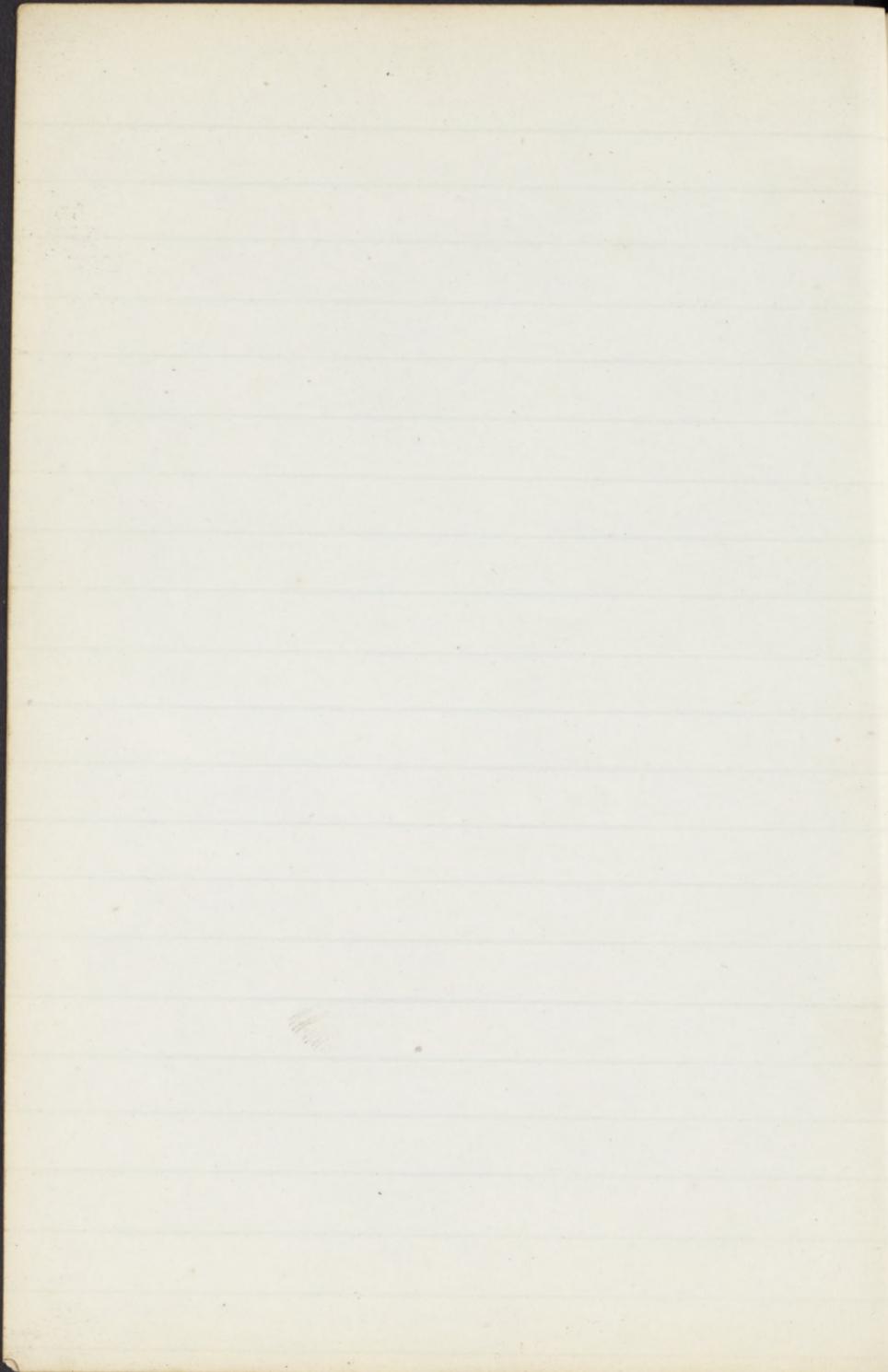


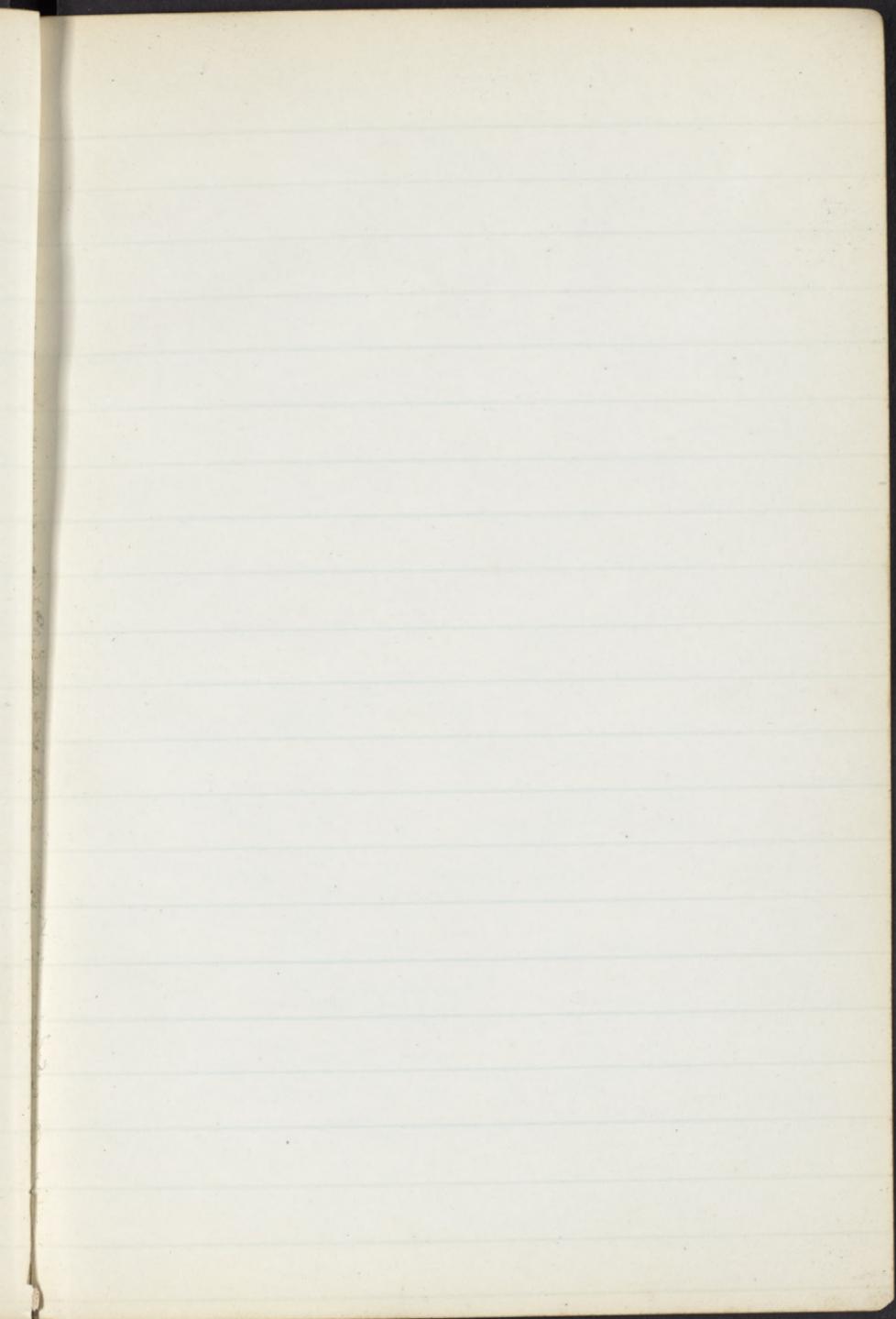


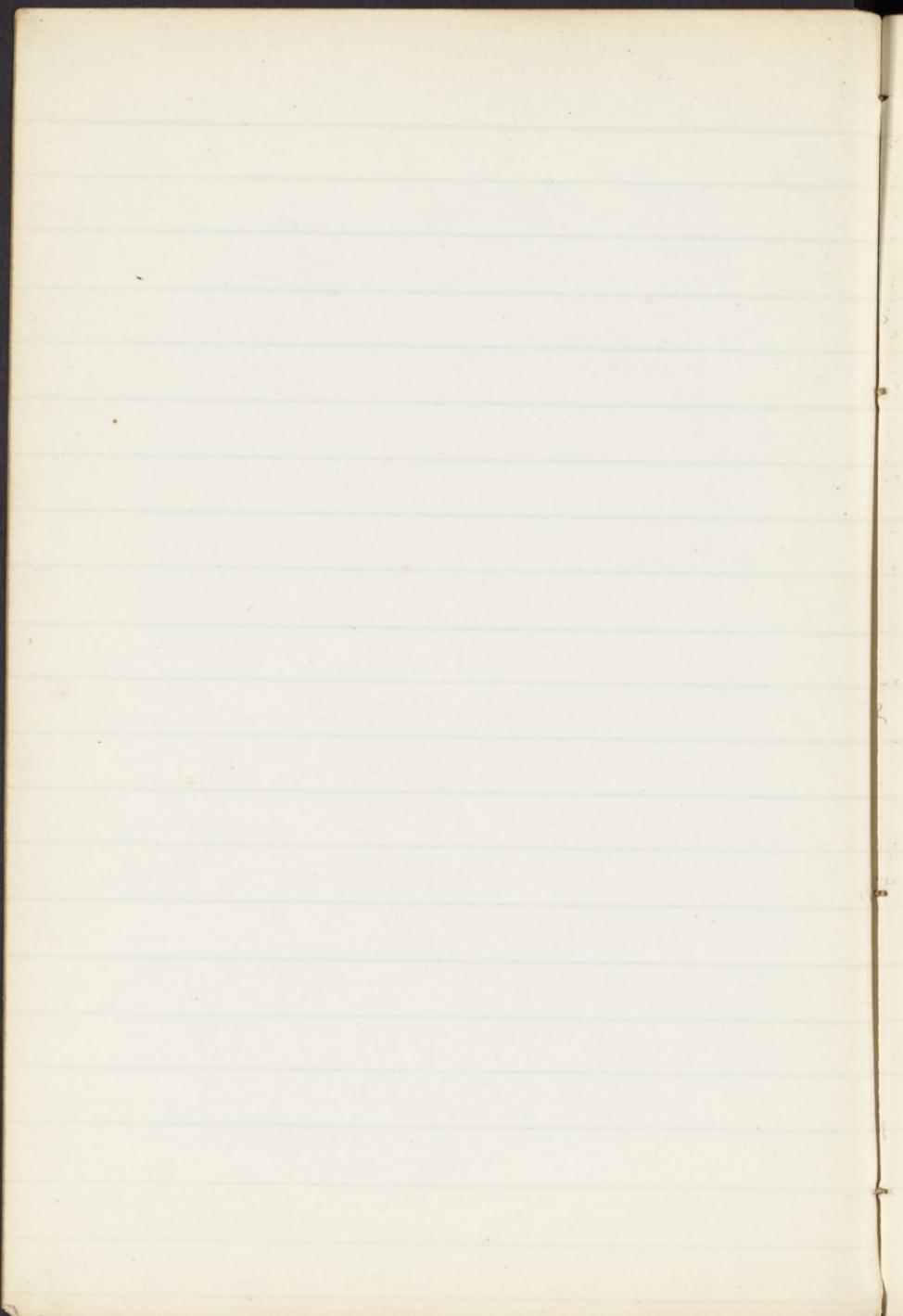


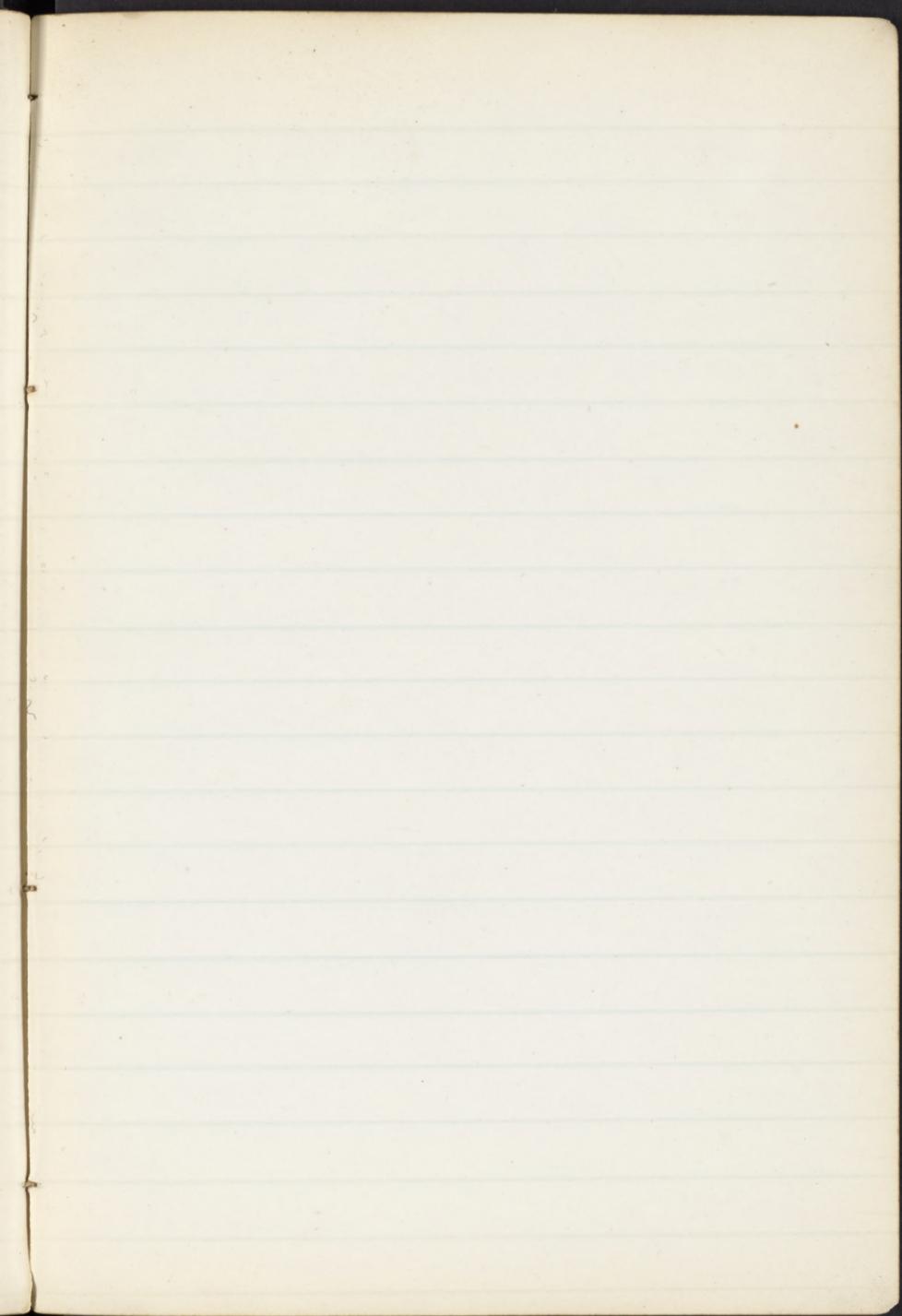


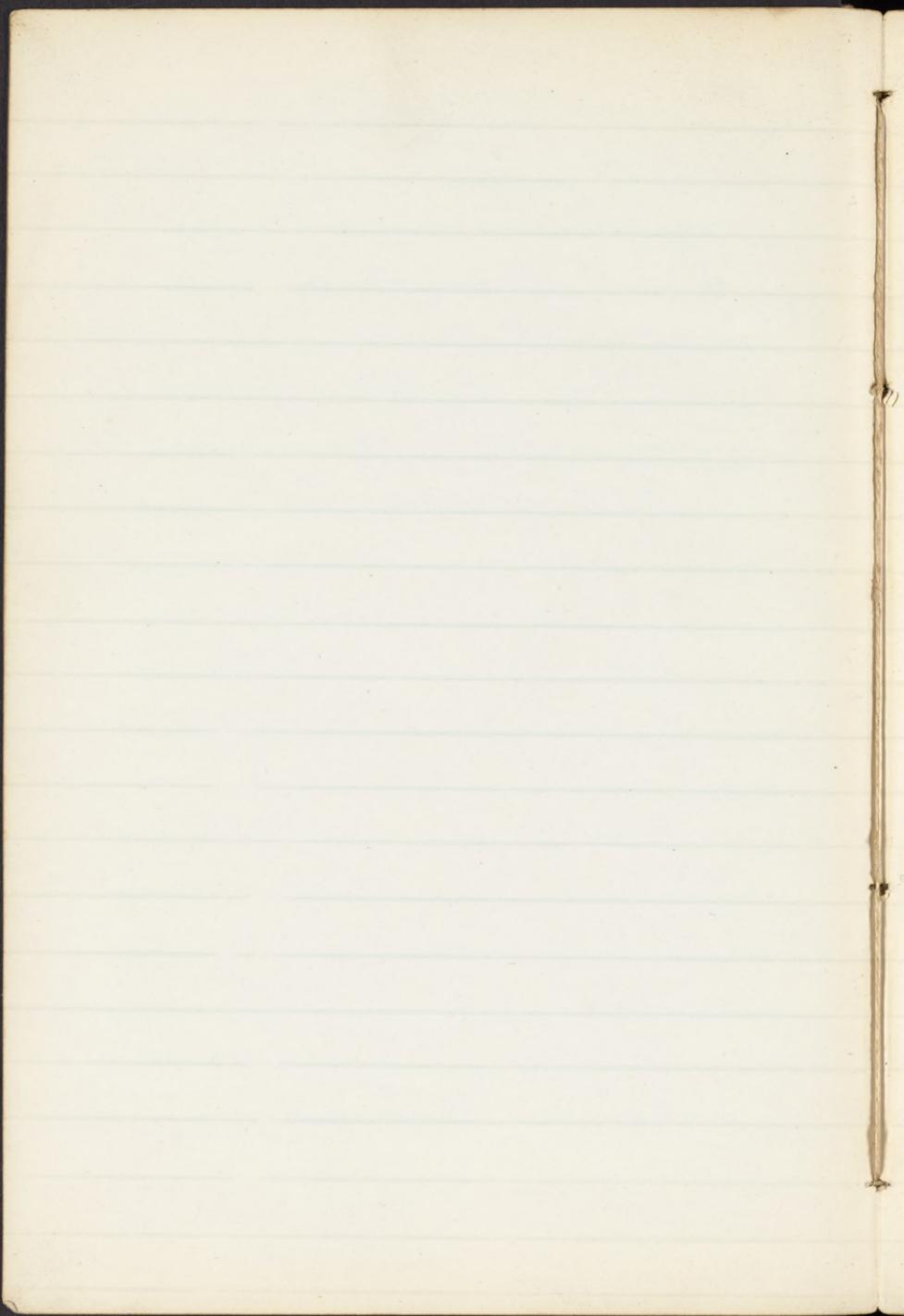


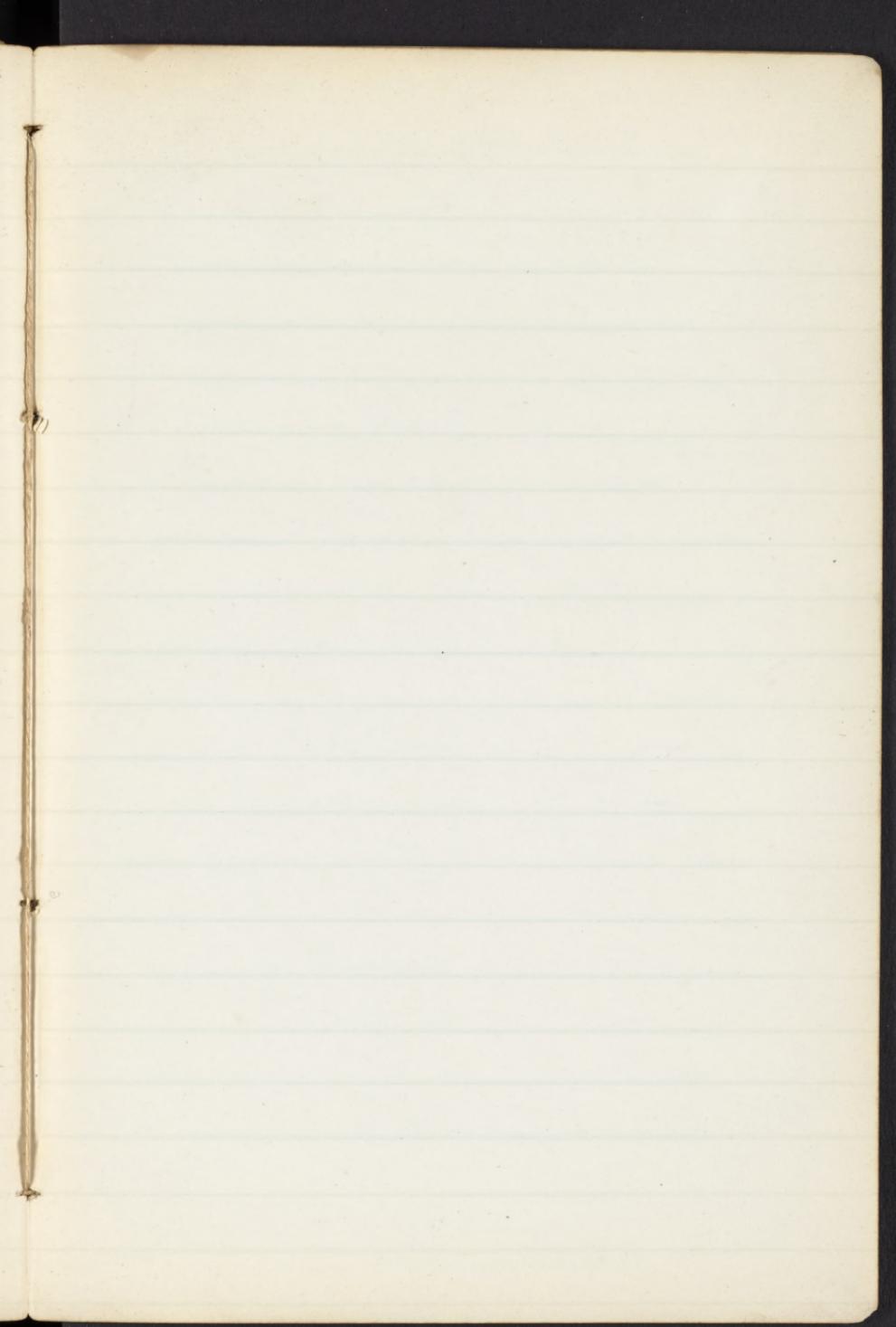


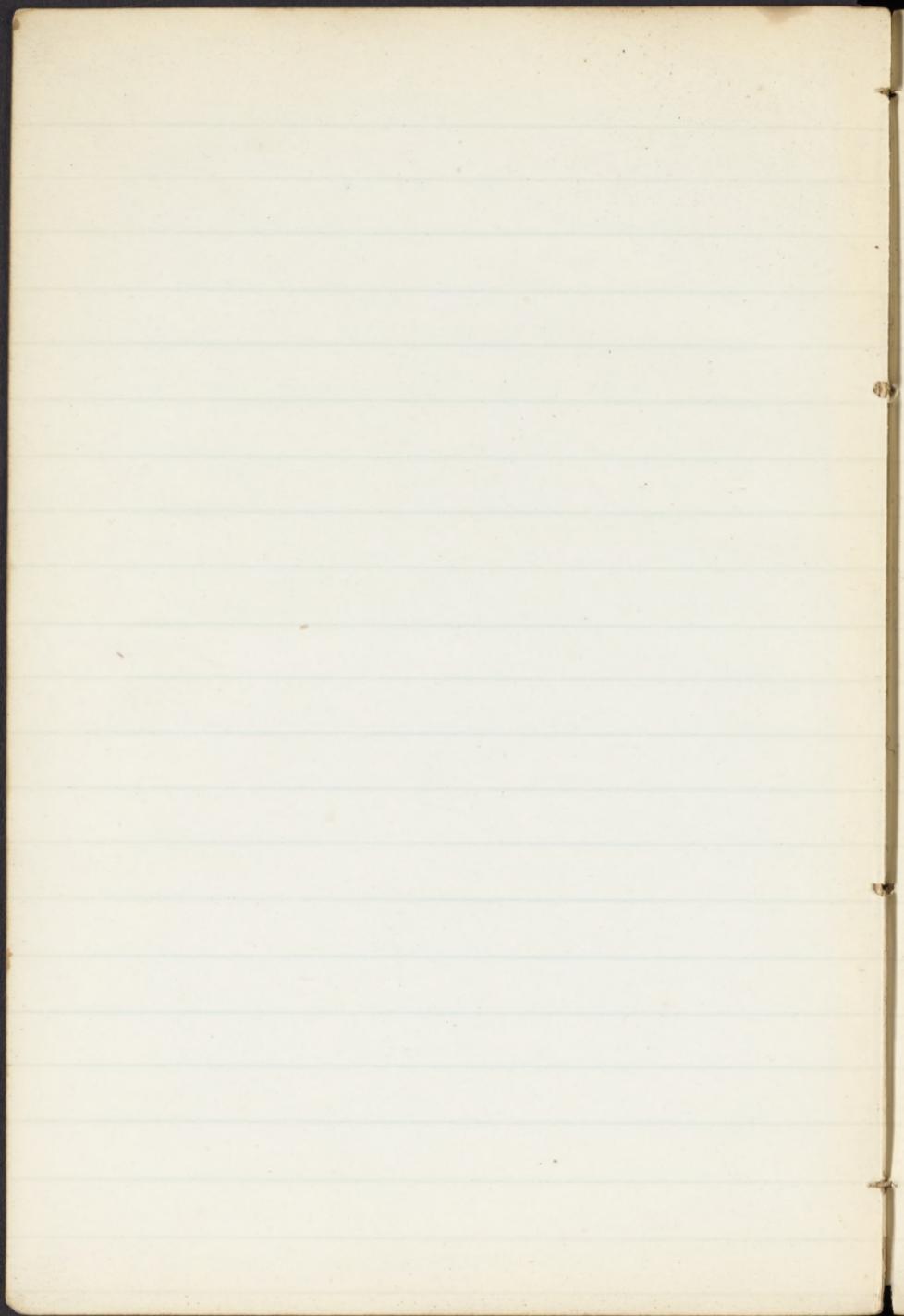


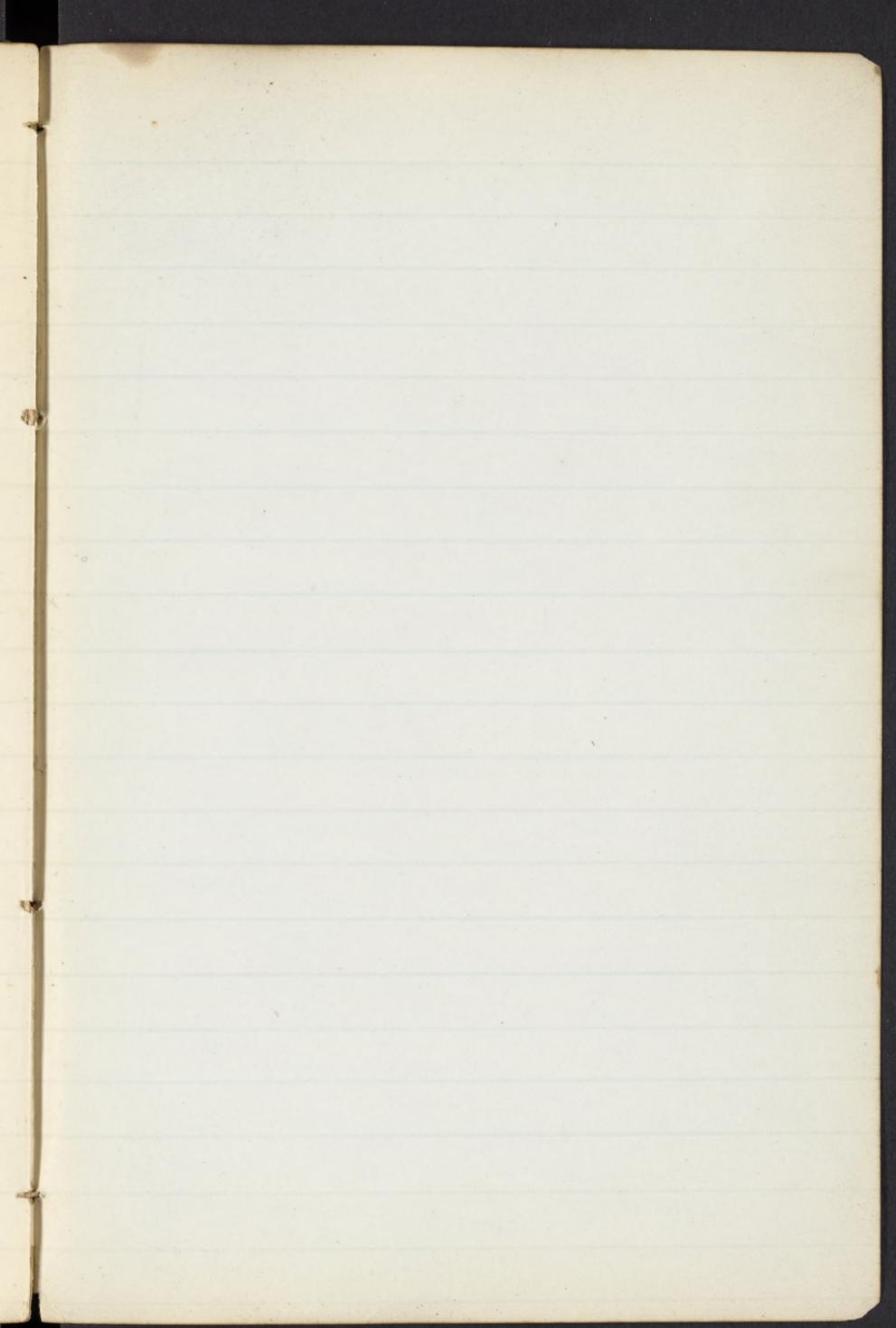


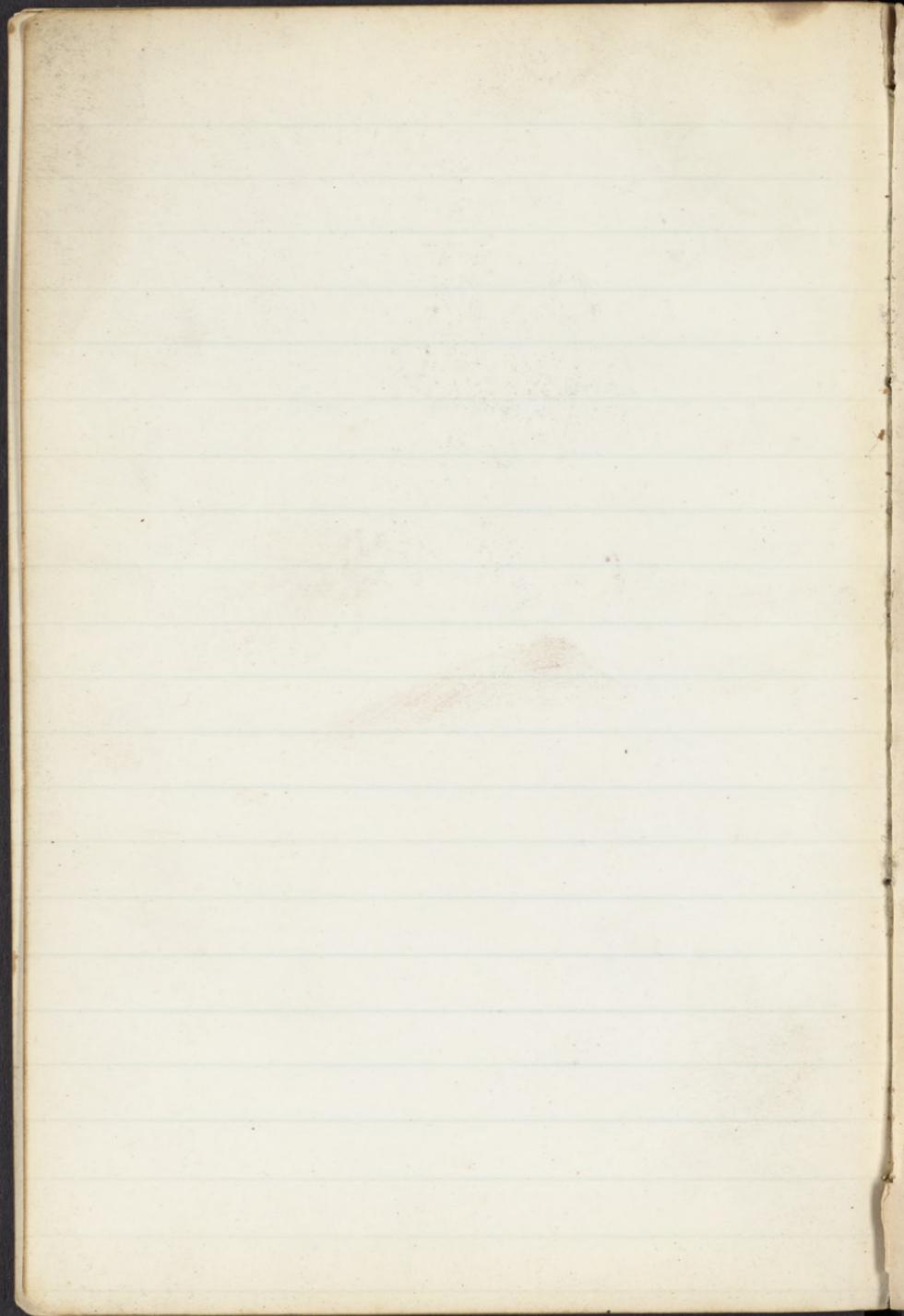














2.00	5.00
5.00	5.00
8.00	3.00
	5.50
45.25	
13.50	73.50
11.75	



Pond lamp egg X

water Pint

Girth of an Egg

Land

Kerosene

No vole velis

